

FIG. 1A  
(PRIOR ART)

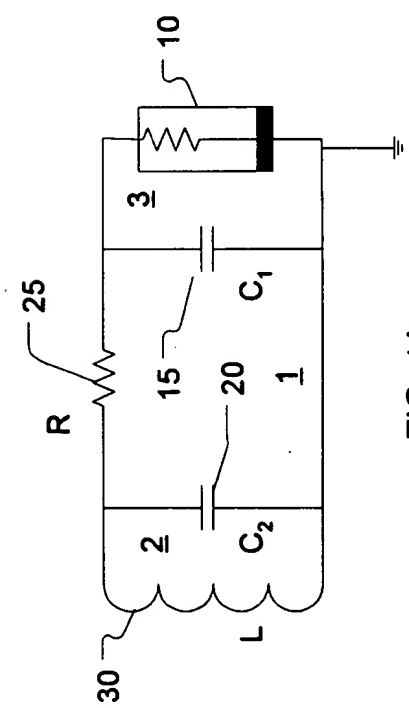


FIG. 1C  
(PRIOR ART)

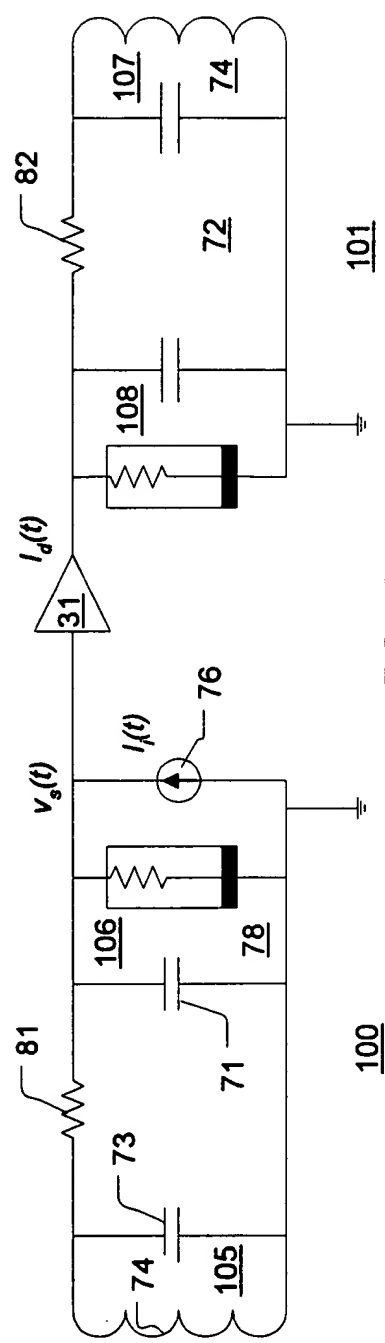


FIG. 1B  
(PRIOR ART)

100

101

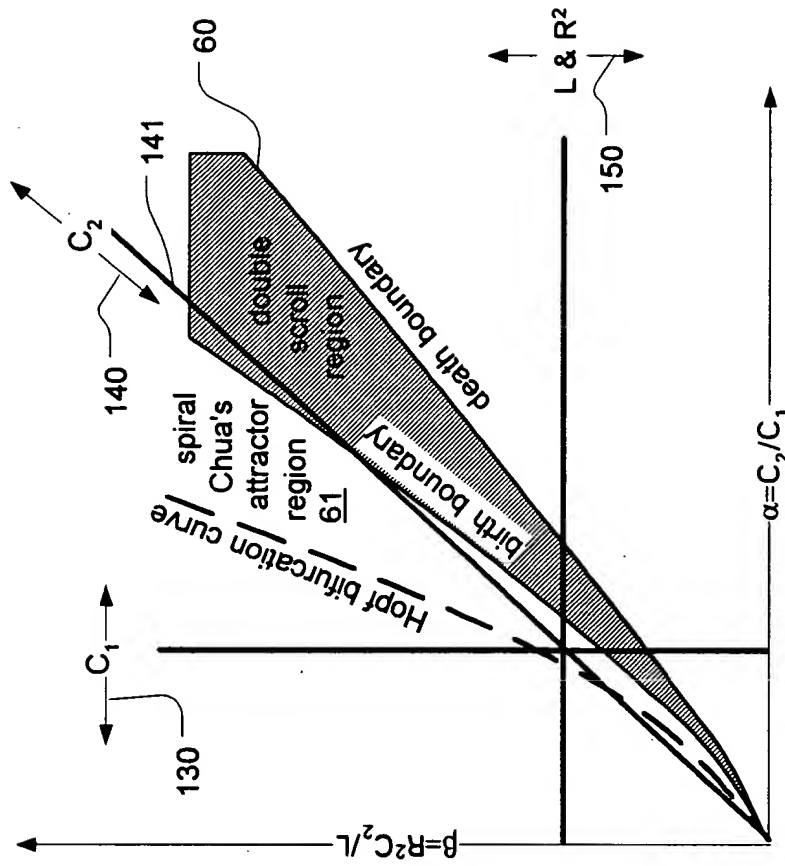


FIG. 1D

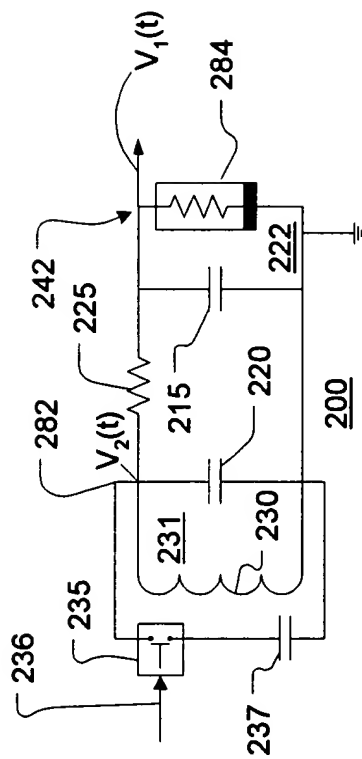


FIG. 2A

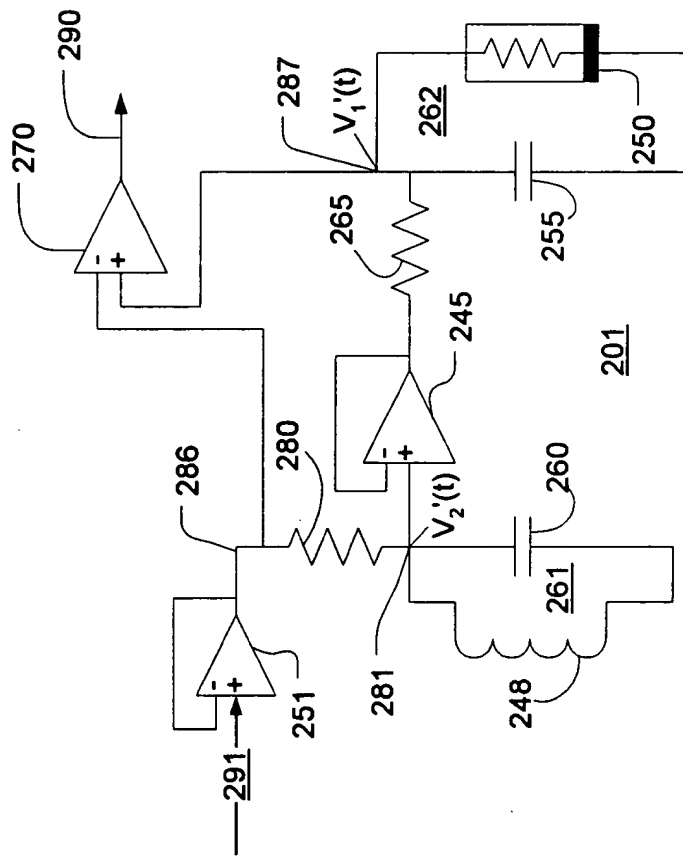


FIG. 2B  
(PRIOR ART)

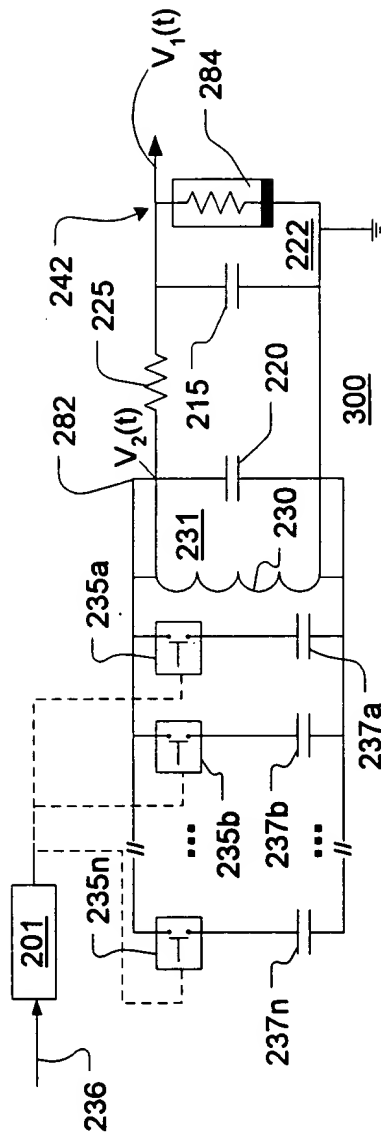


FIG. 3A

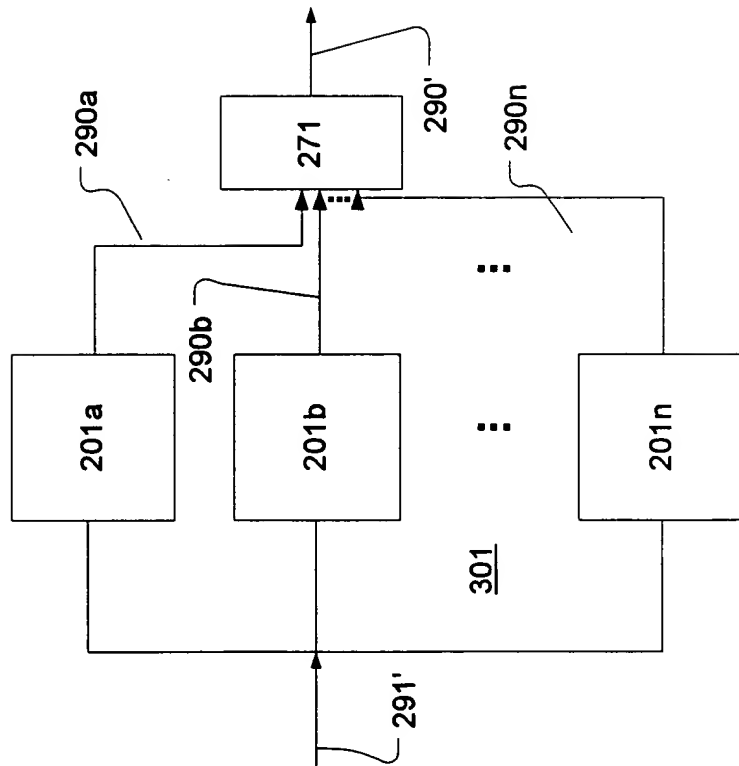
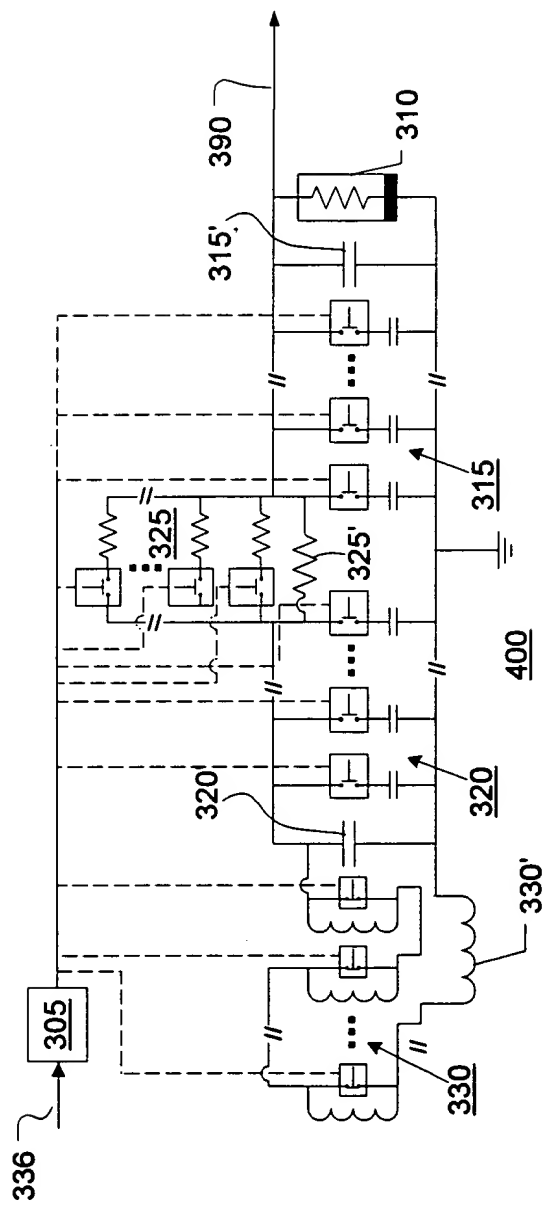
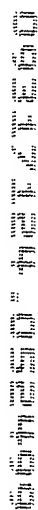
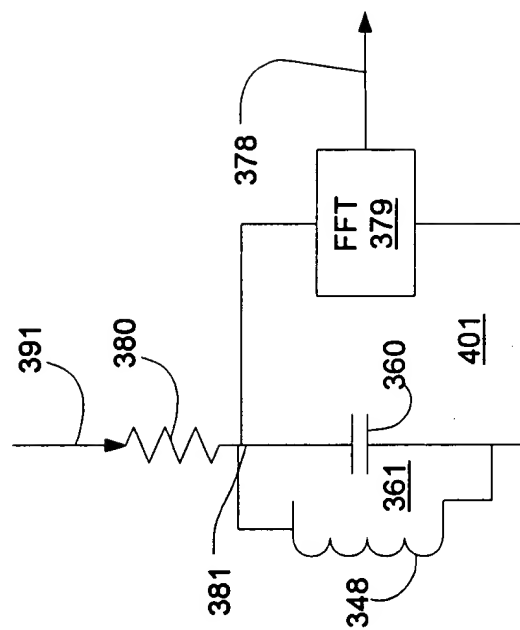


FIG. 3B



**FIG. 4A**



**FIG. 4B**

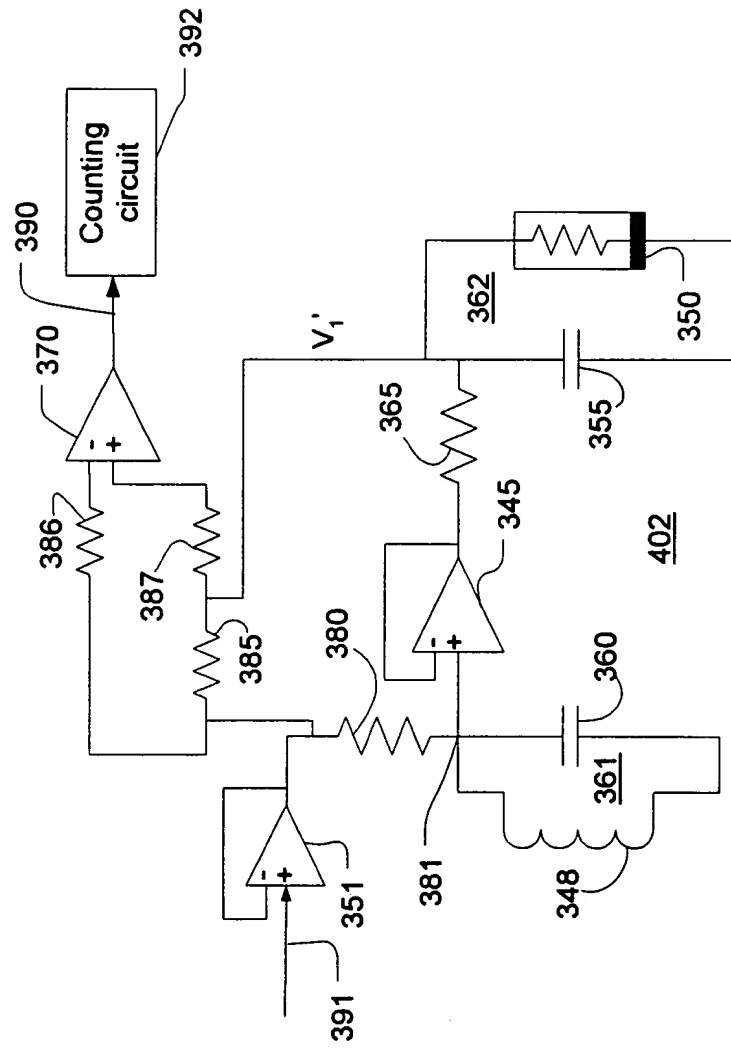


FIG. 4C

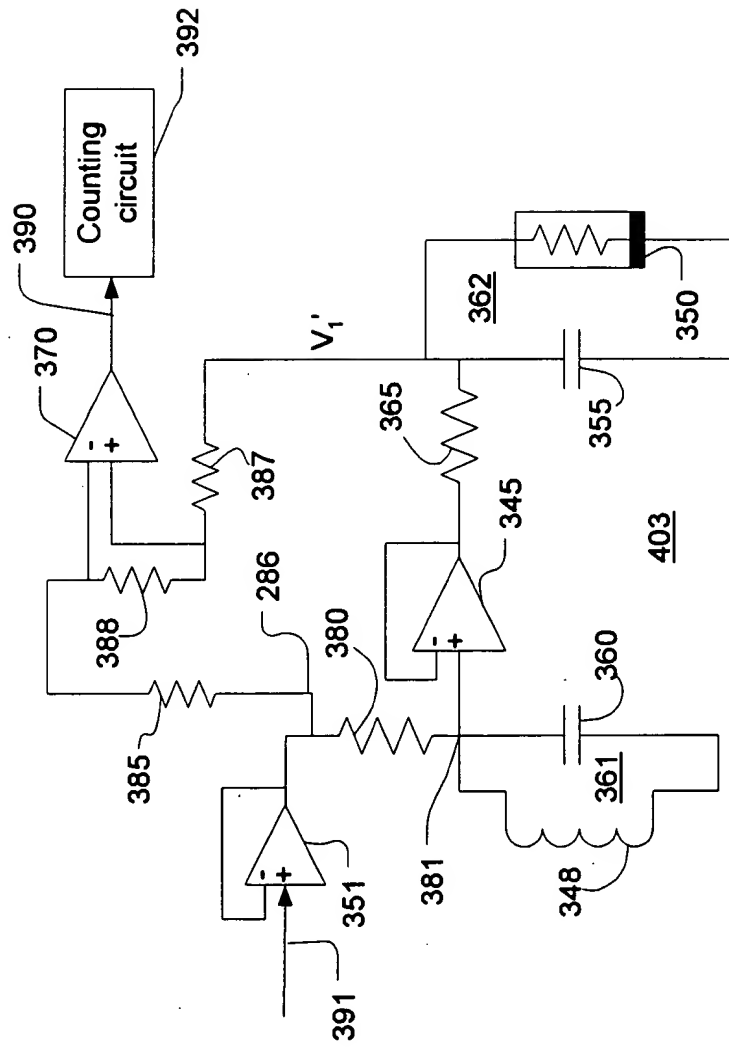


FIG. 4D

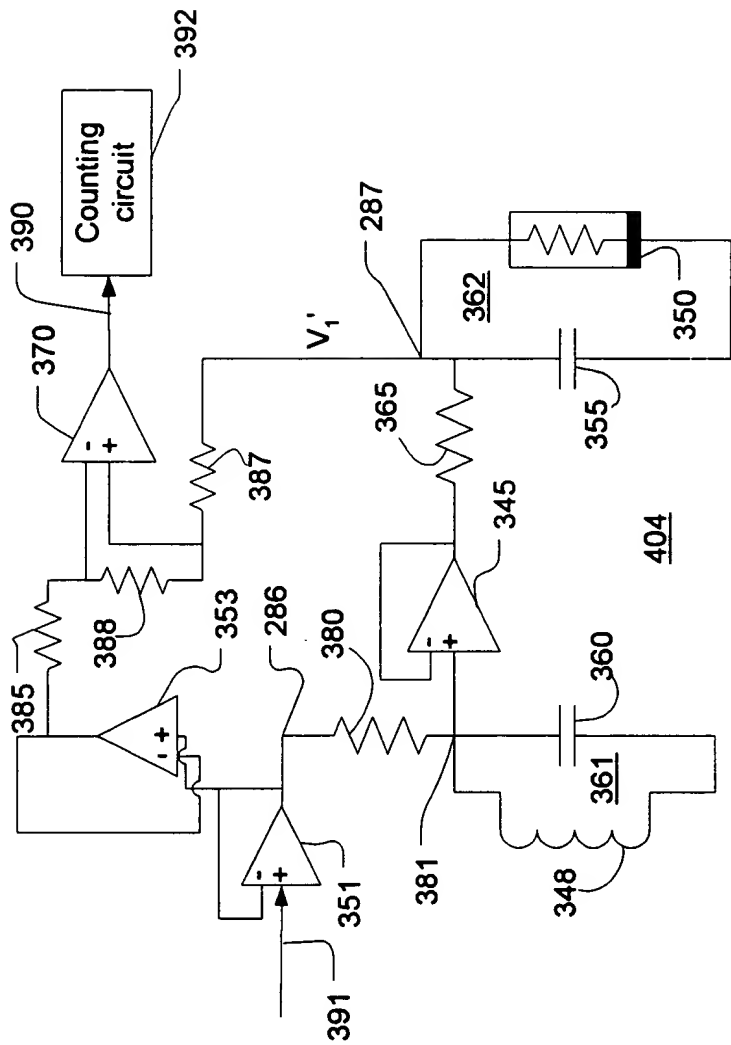


FIG. 4E



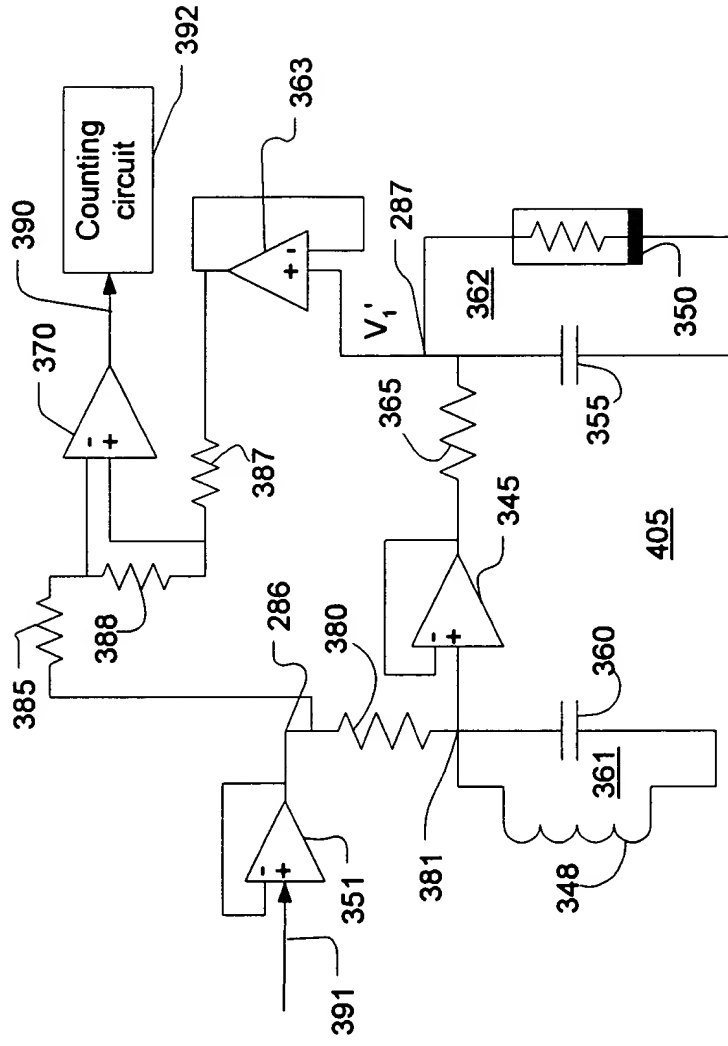


FIG. 4F

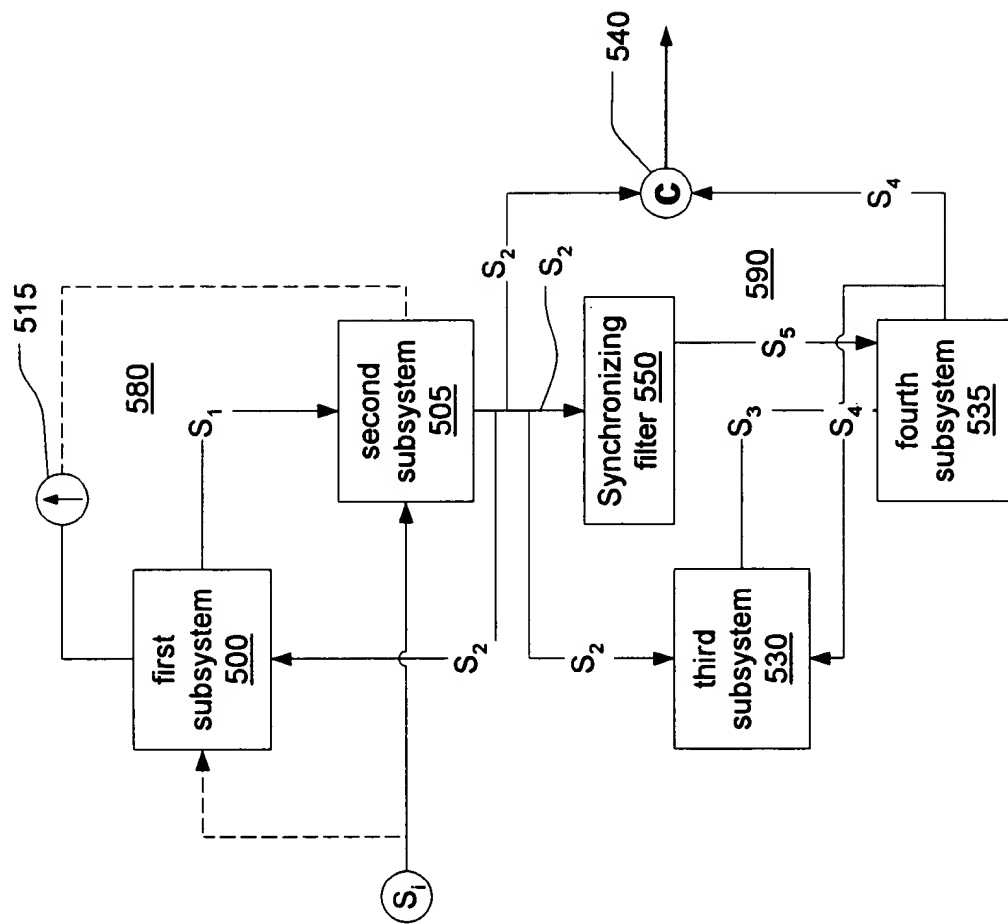


FIG. 5

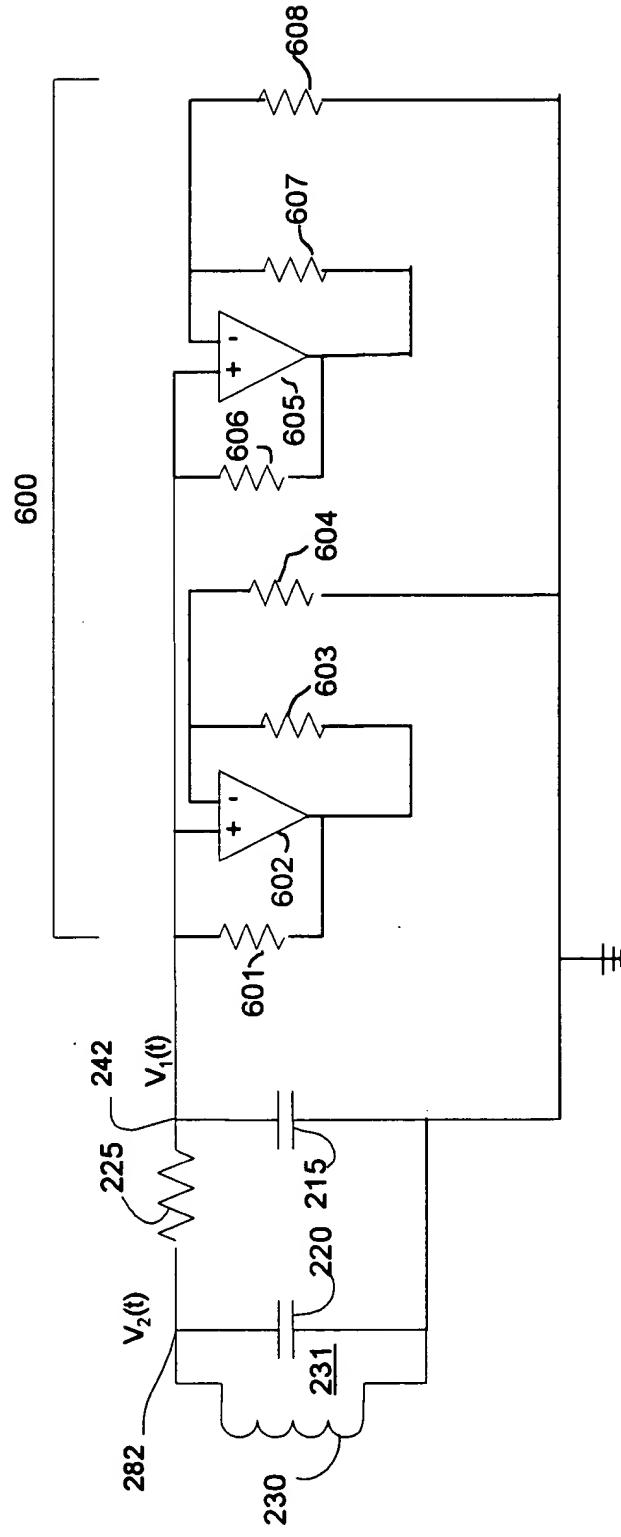


FIG. 6A  
(PRIOR ART)

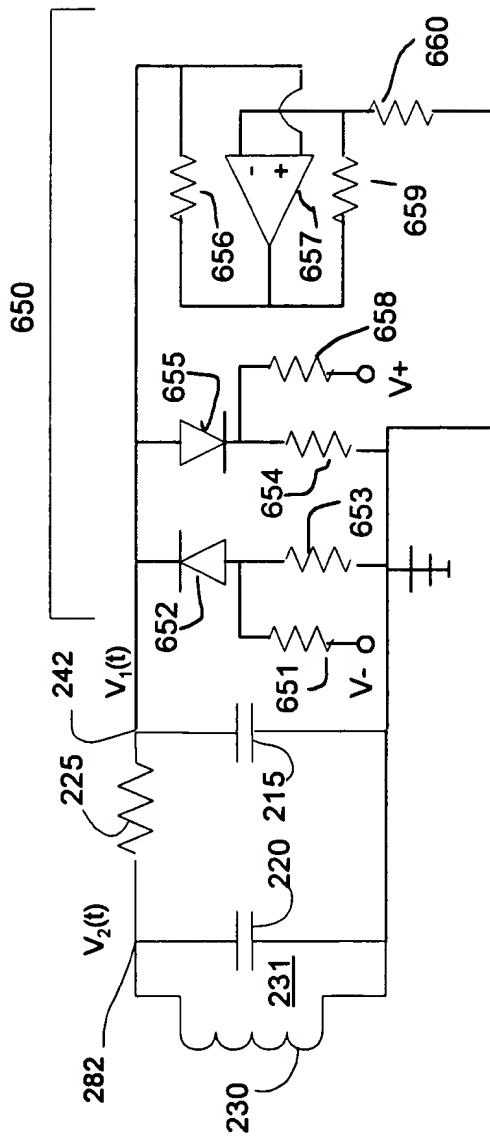


FIG. 6B  
(PRIOR ART)

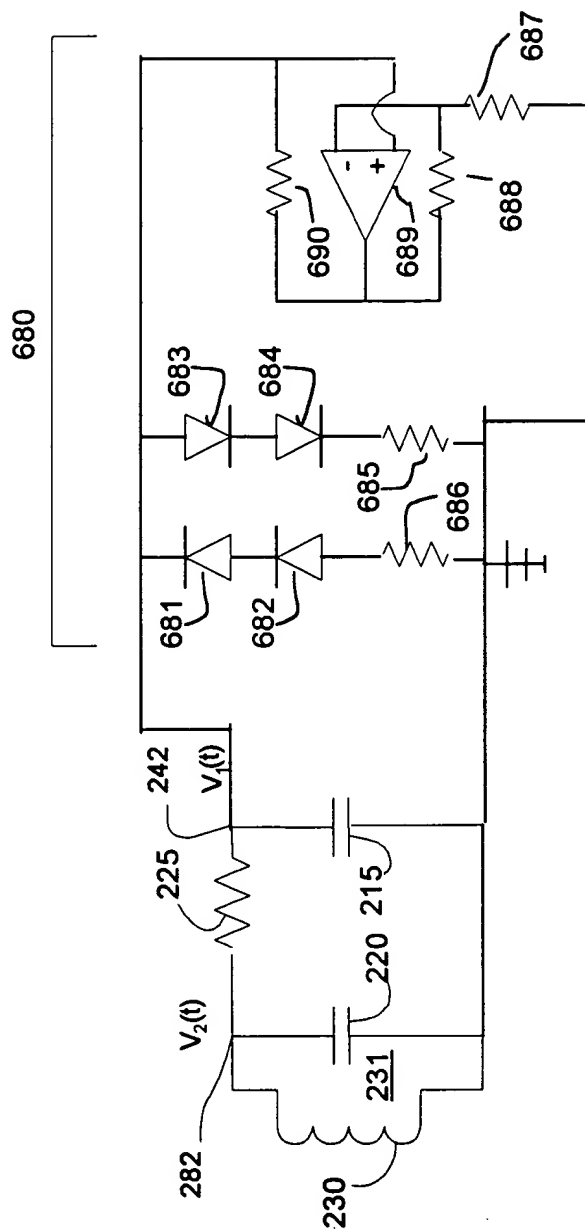


FIG. 6C

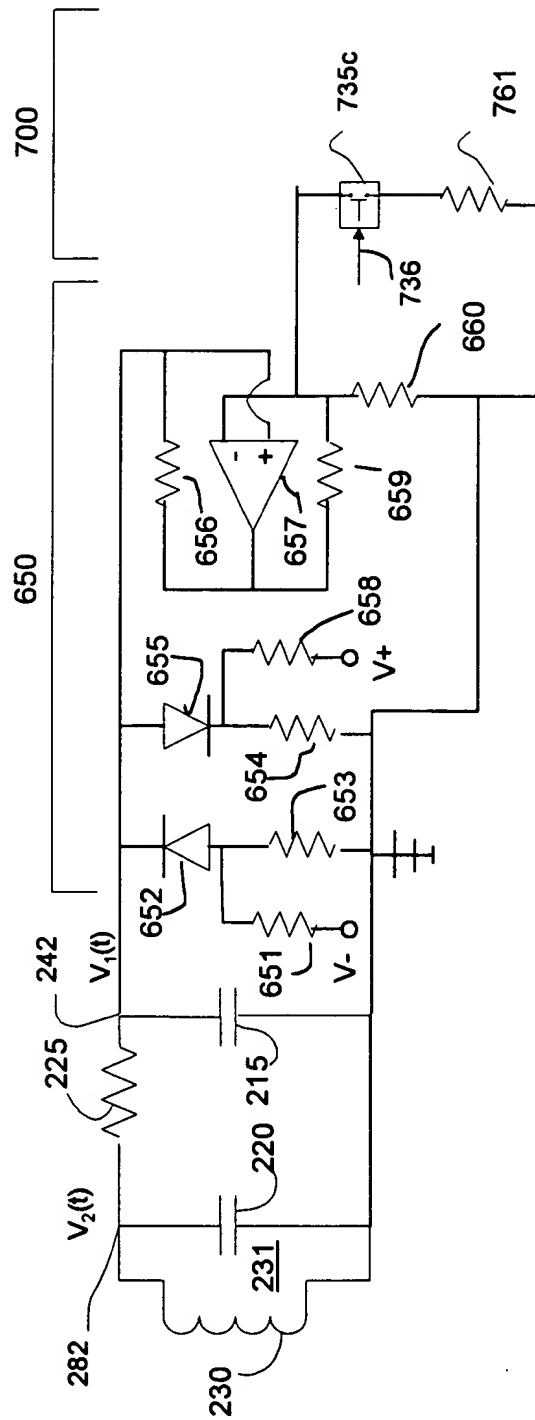


FIG. 7A

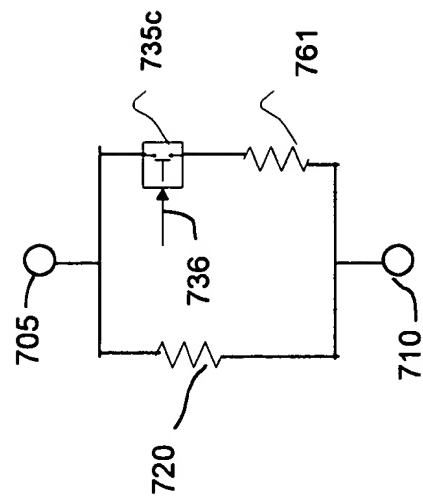


FIG. 7B

Fig 6b Caltech	R2'	R2	R1	R2' / R2	R2' / R2 / R1
element	653	654	660	653/654	653/654/660
Ga			x		x
Gb upper scroll		x	x	x	x
Gb lower scroll	x		x	x	x

Ga = -1/R1  
Gb = (R1-R2)/(R1\*R2)

Fig 6a Kennedy	R4	R5	R6	R1	R2	R3	R1/R3	R1/R2/R3	R5/R6	R1/R2/R3/ R4
element	601	603	604	606	607	608	606/608	606/608/607	603/604	606/607/608/601
Ga	x	x	x	x	x	x	x	x	x	x
Gb upper	x			x	x	x	x	x		x
Gb lower	x			x	x	x	x	x		x

Ga = -(R2/(R1\*R3)-(R5/(R4\*R6)))  
Gb = -(R2/(R1\*R3) + (1/R4))

FIG. 7C



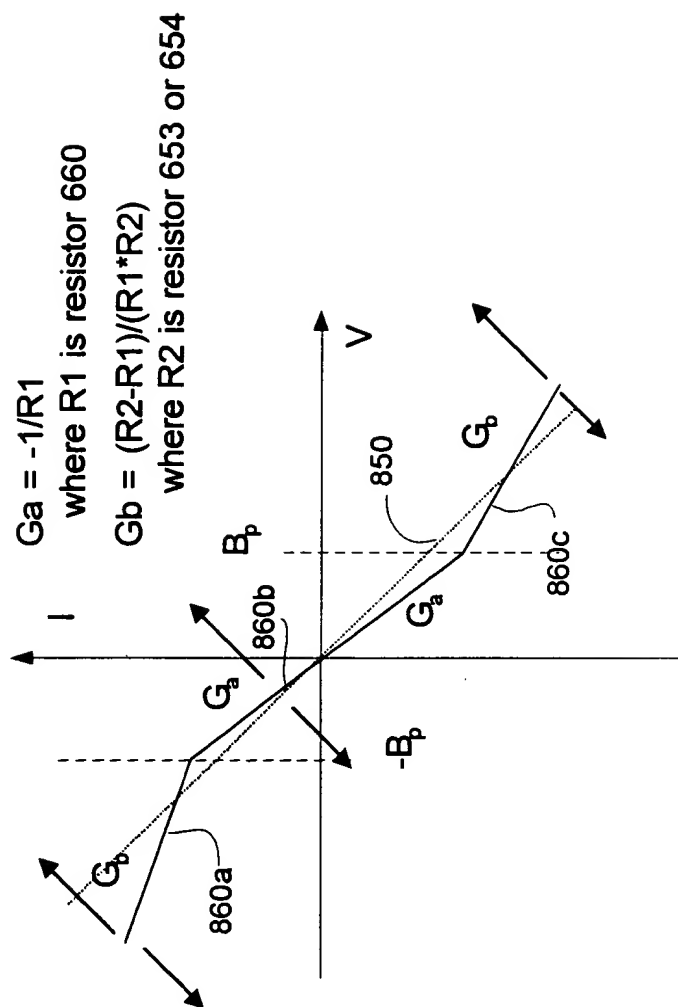


FIG. 8

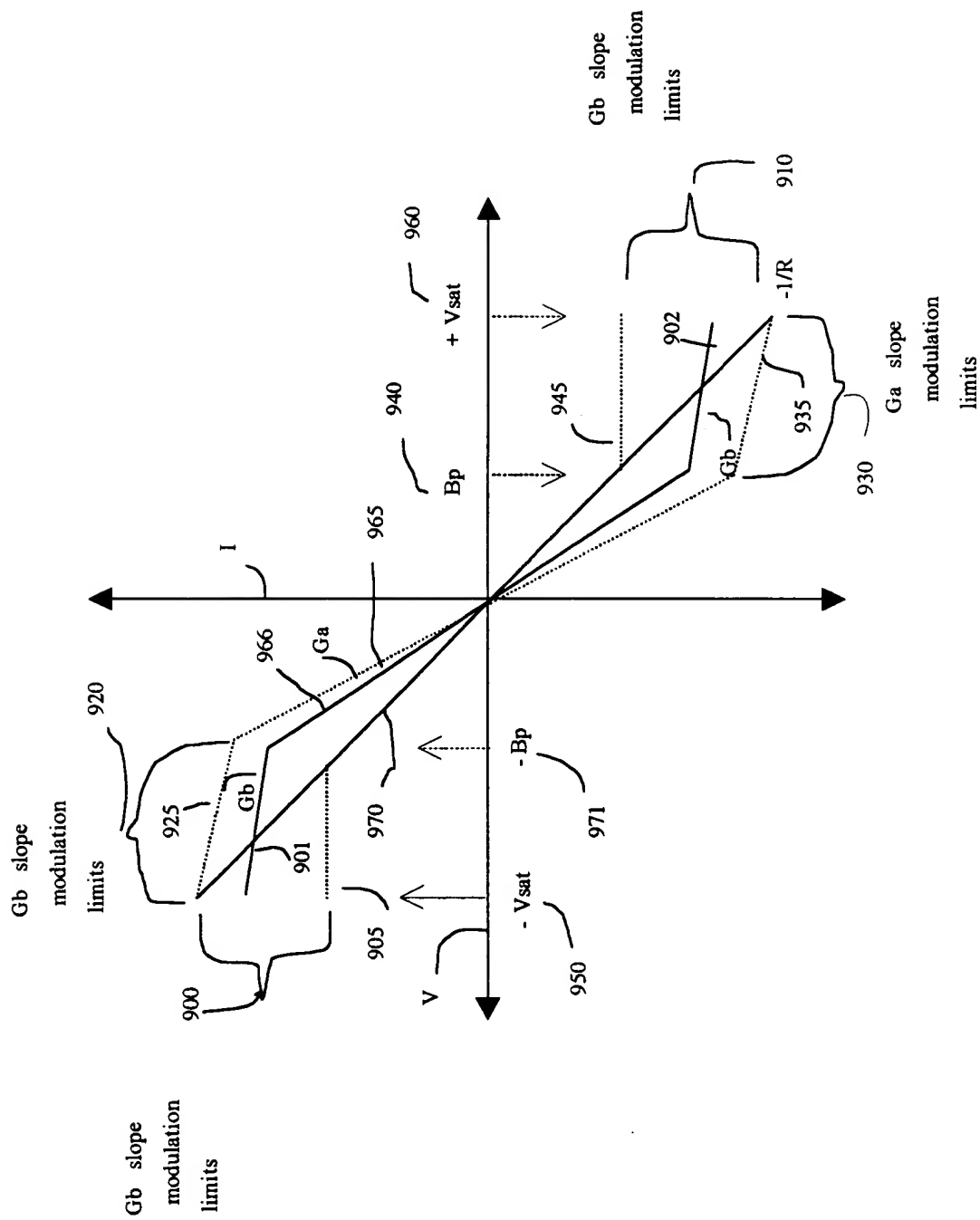
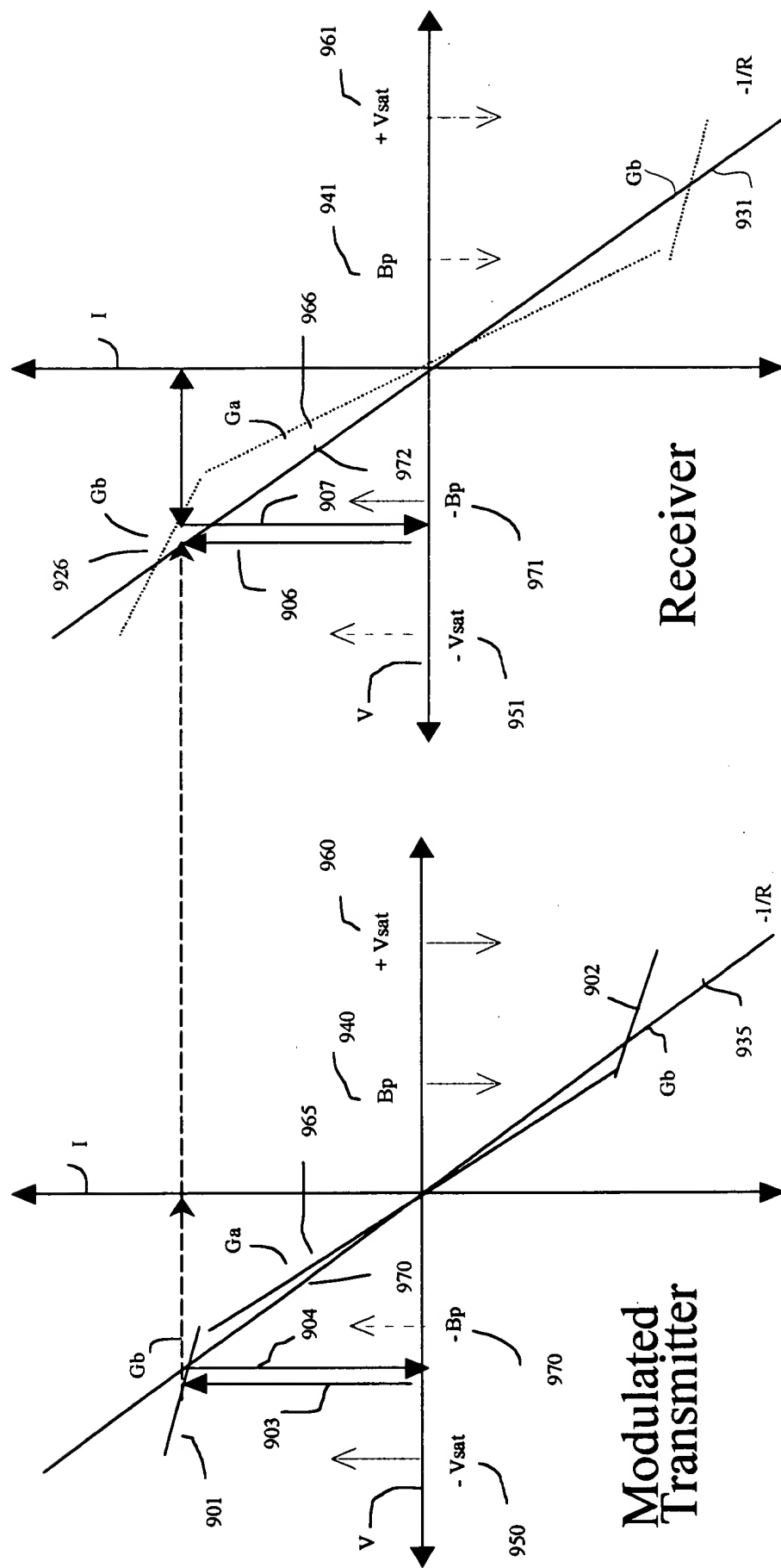


FIG. 9A



**FIG. 9B**

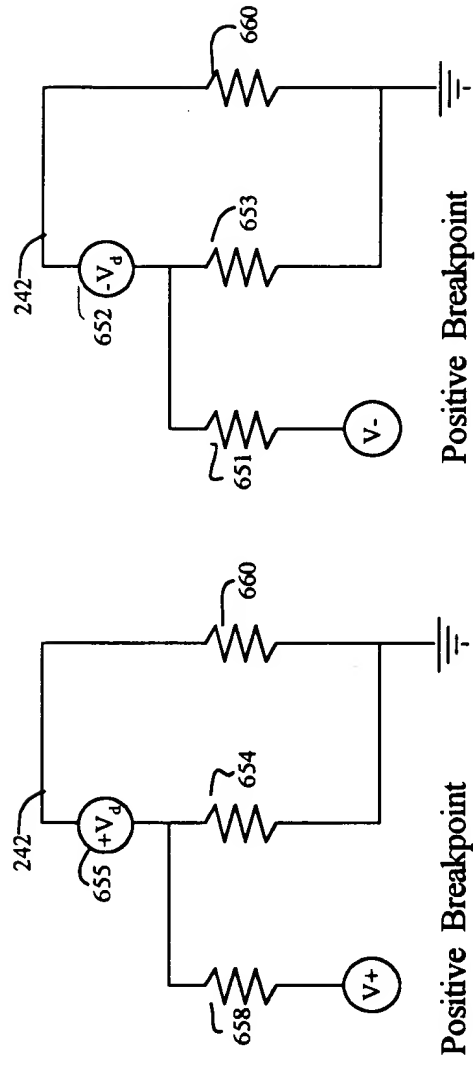


FIG. 9C

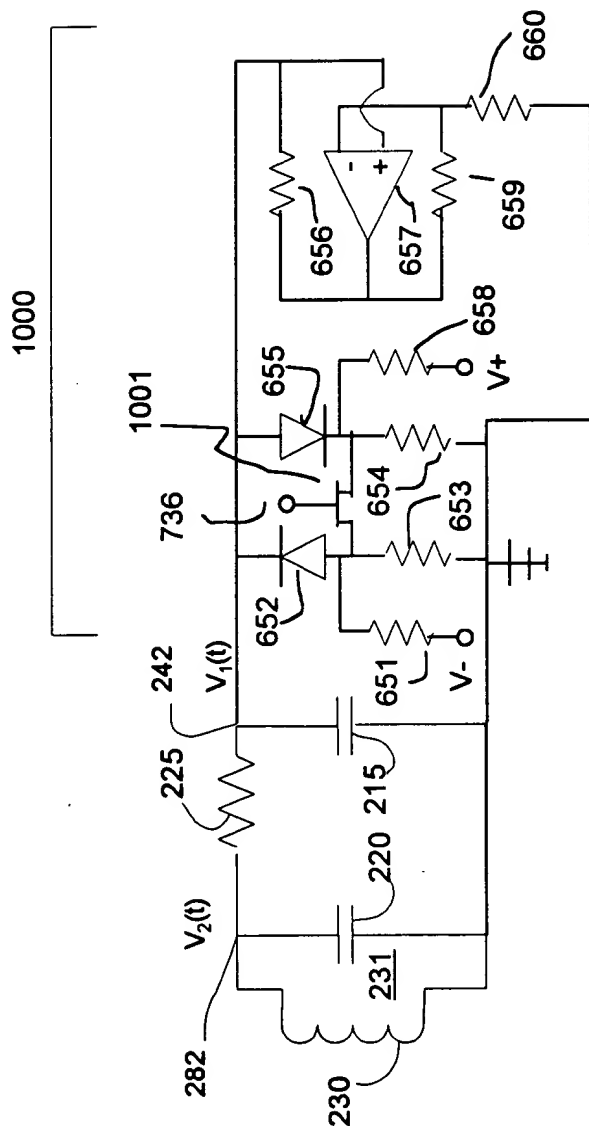


FIG. 10

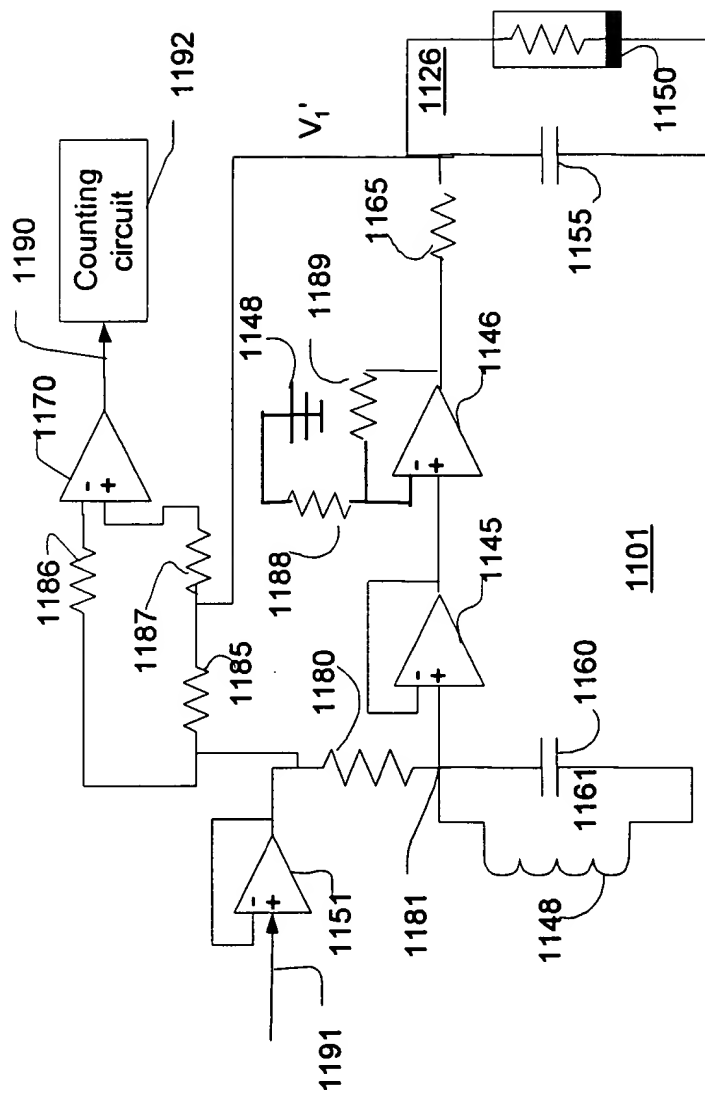


FIG. 11

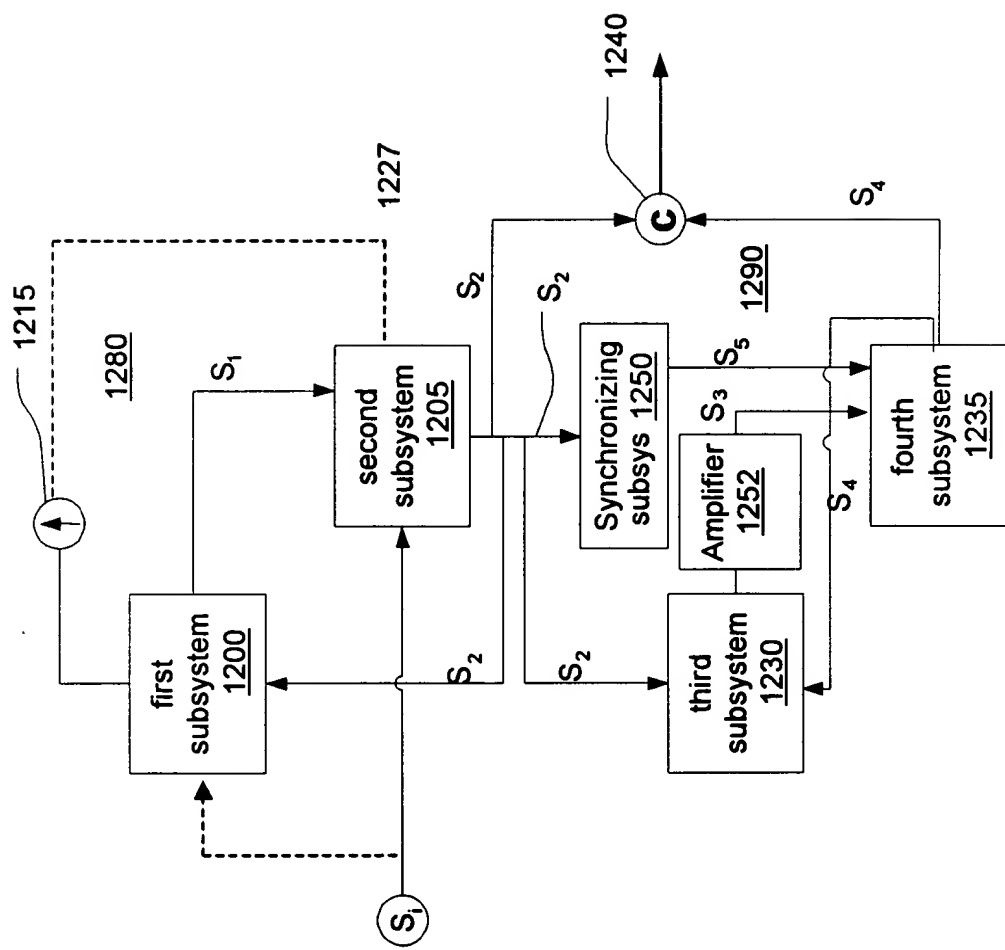


FIG. 12

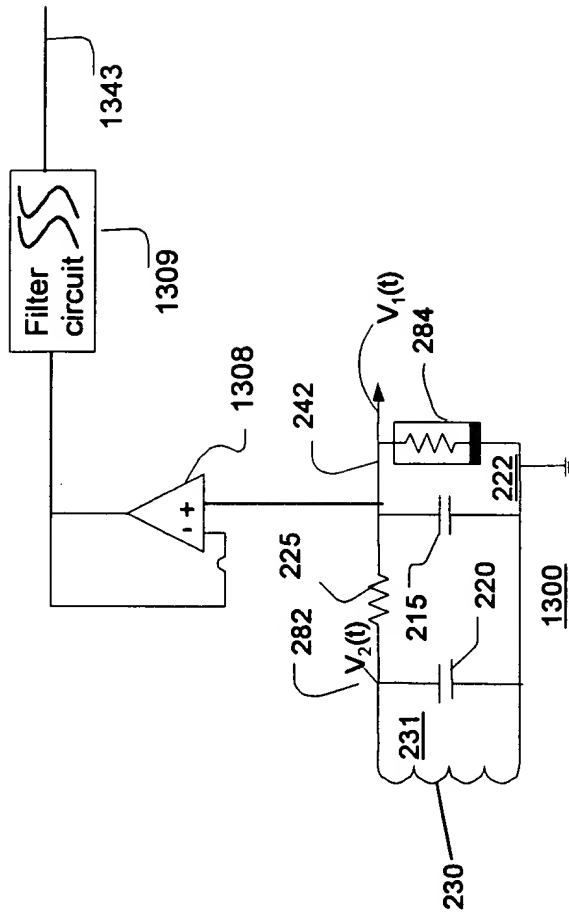


FIG. 13



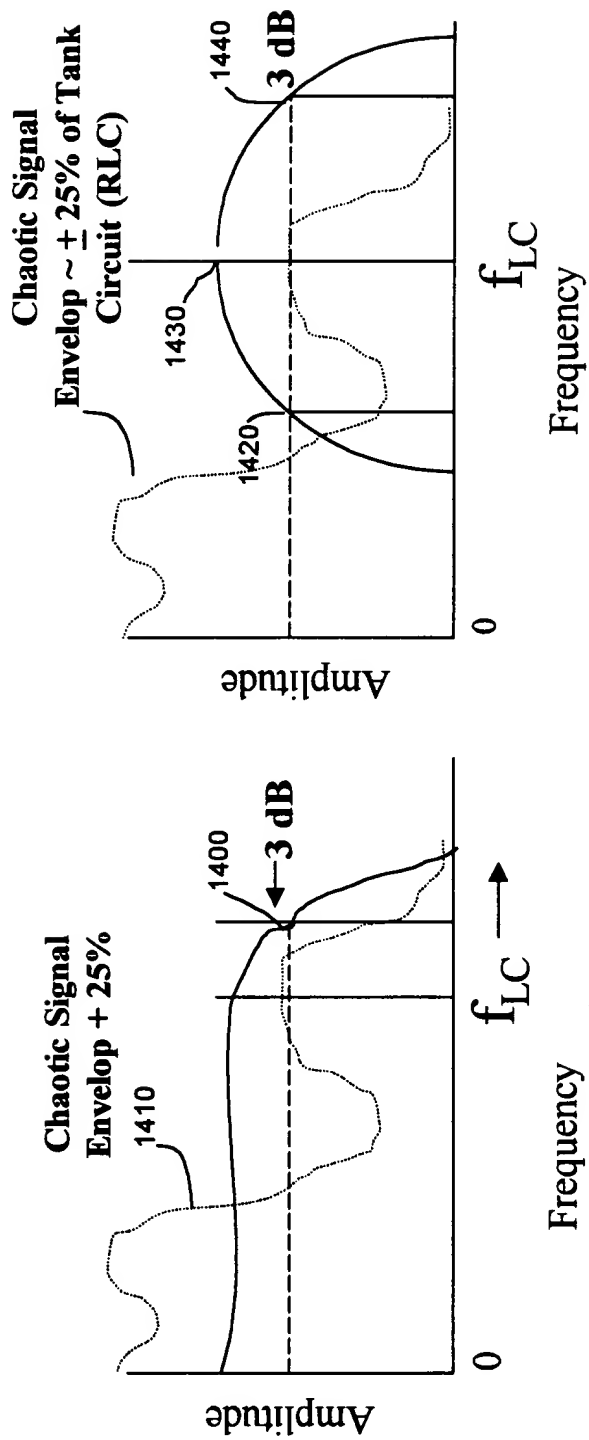


FIG. 14A

FIG. 14B

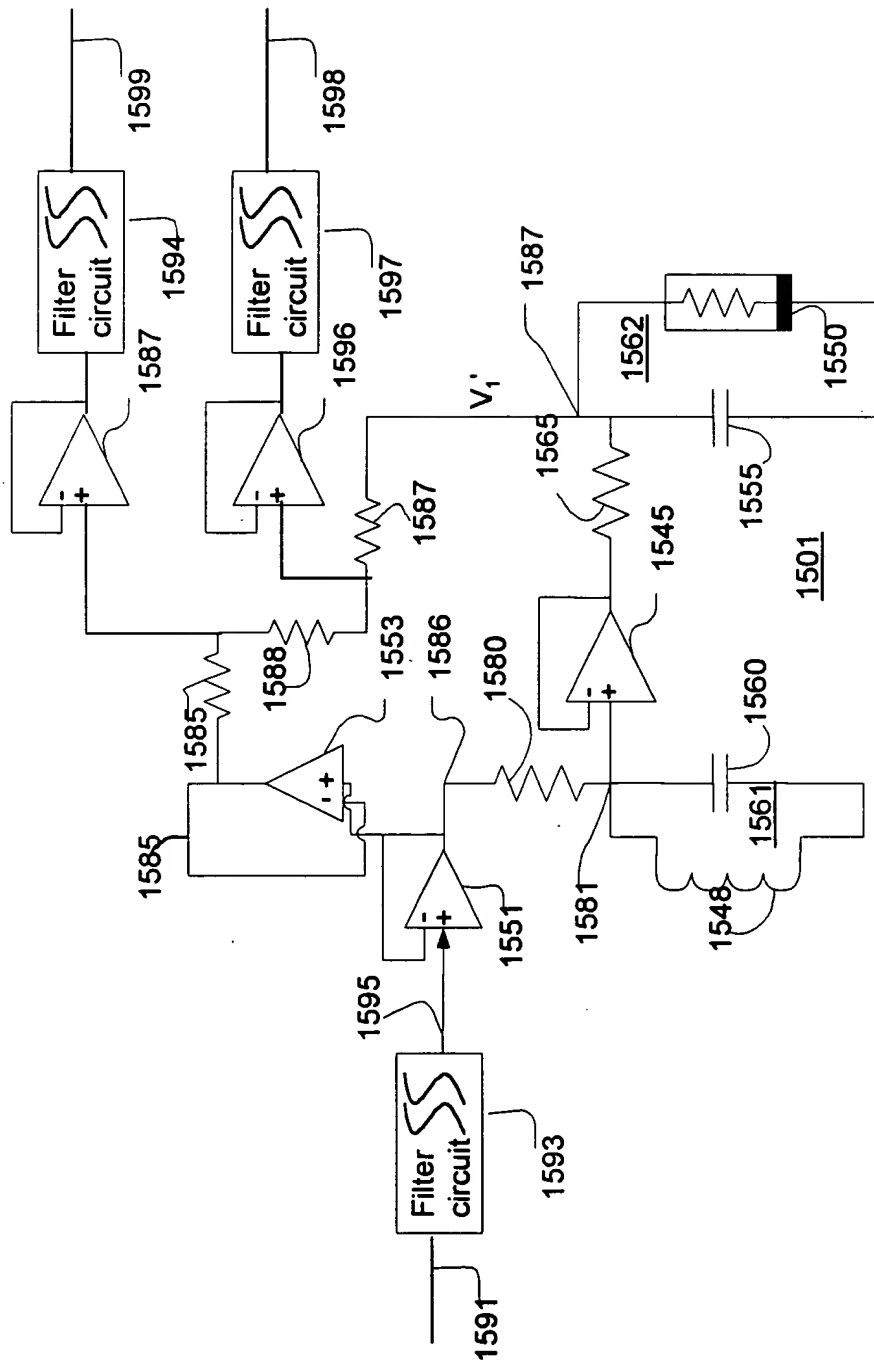
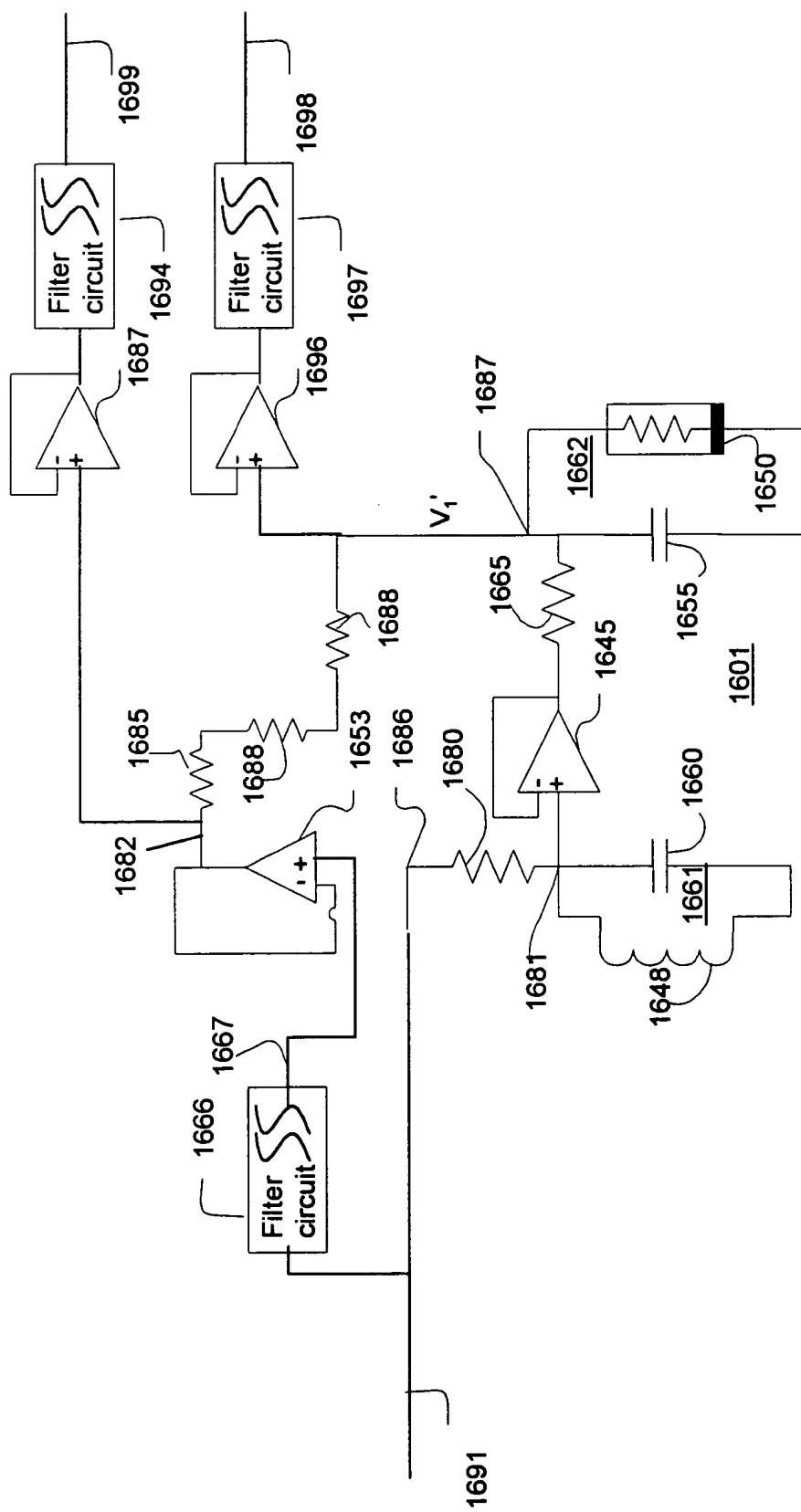


FIG. 15



**FIG. 16**

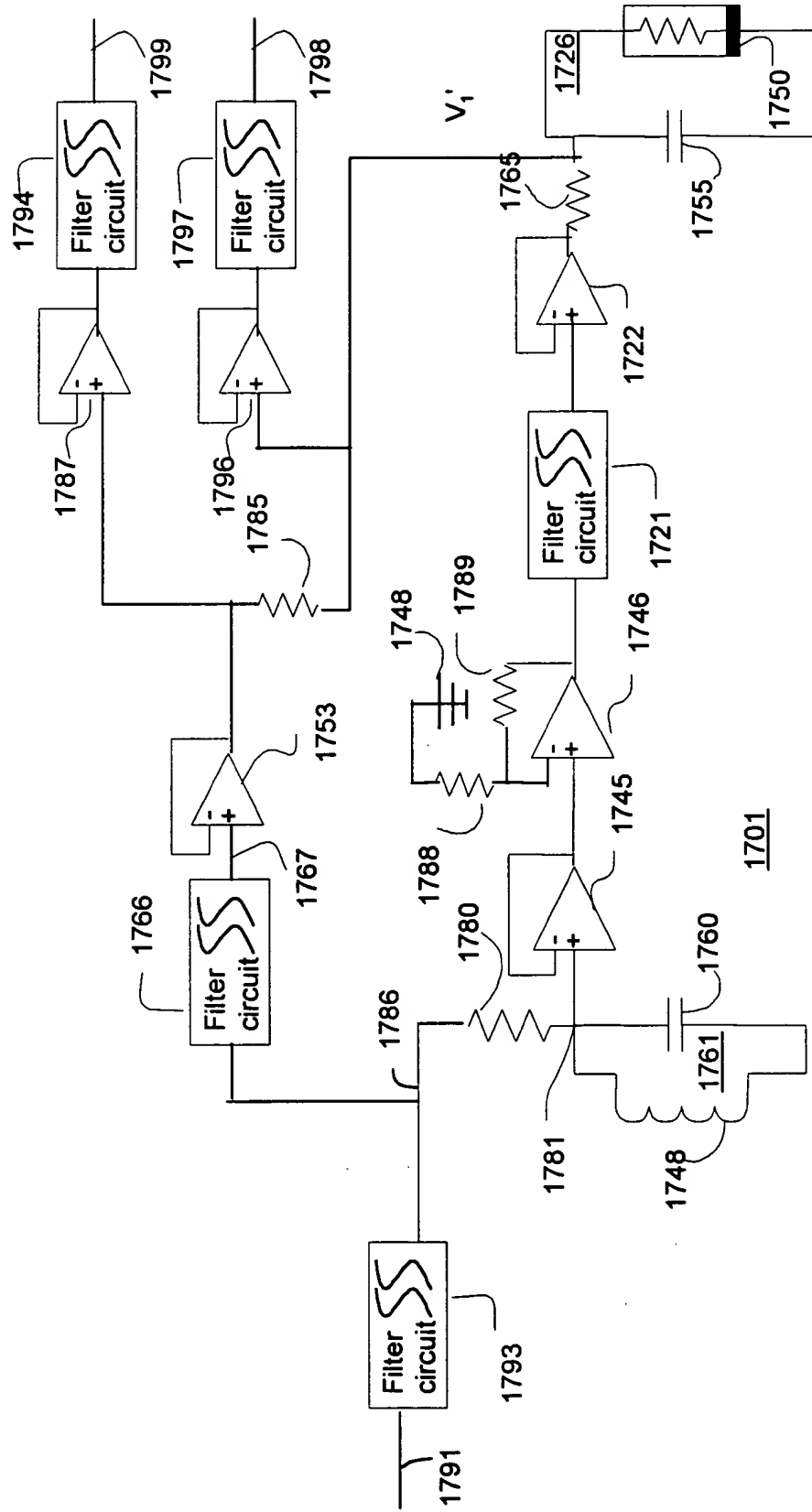


FIG. 17

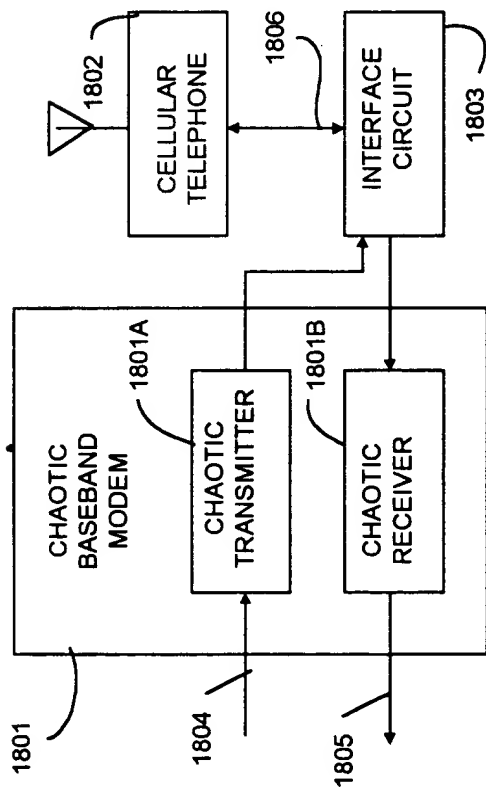


FIG. 18A

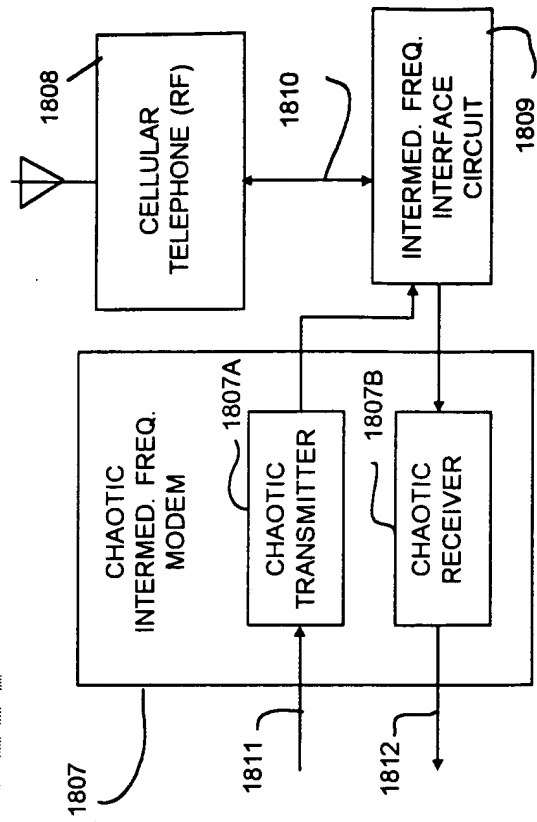


FIG. 18B

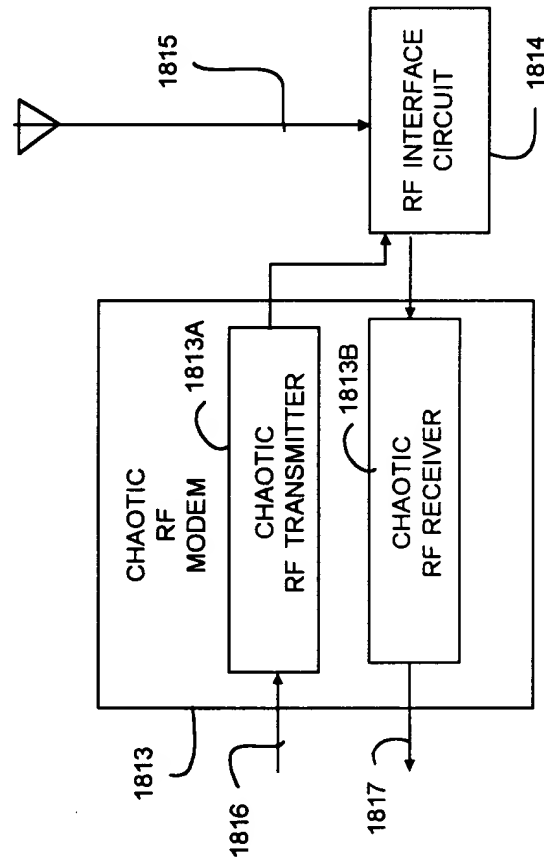


FIG. 18C

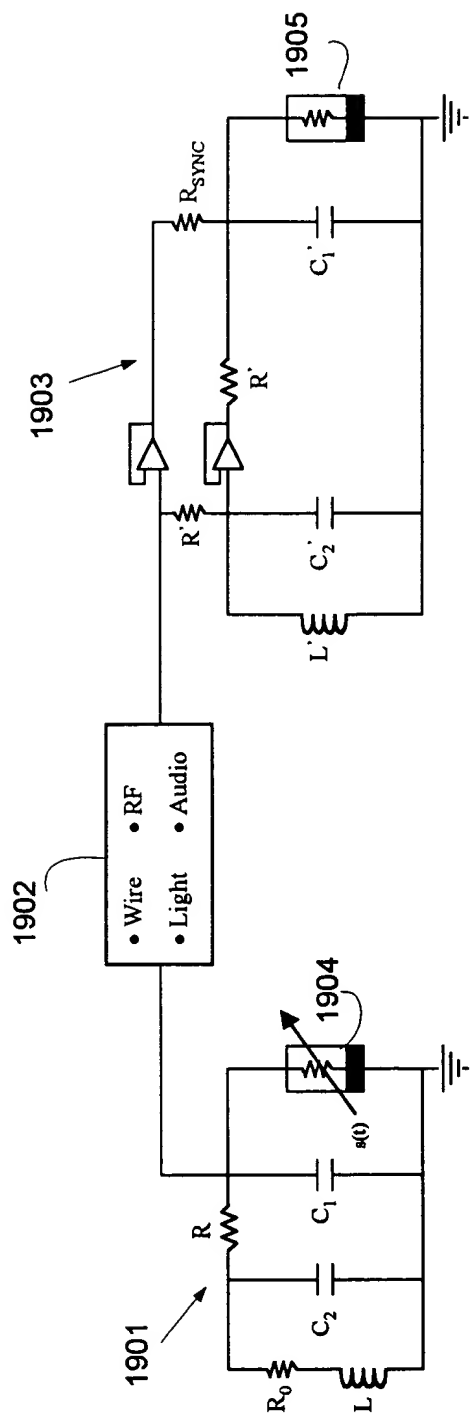


FIG. 19A

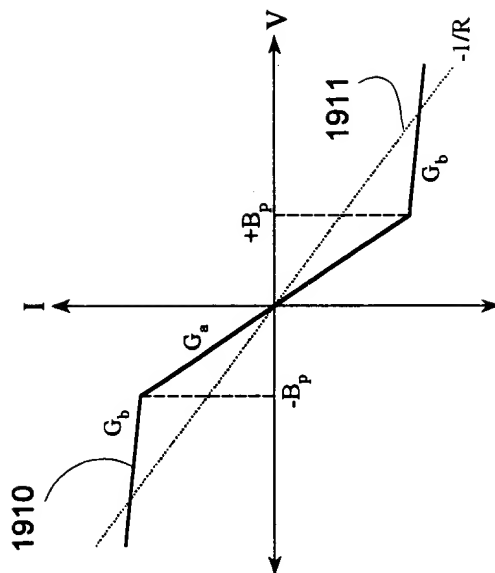


FIG. 19B

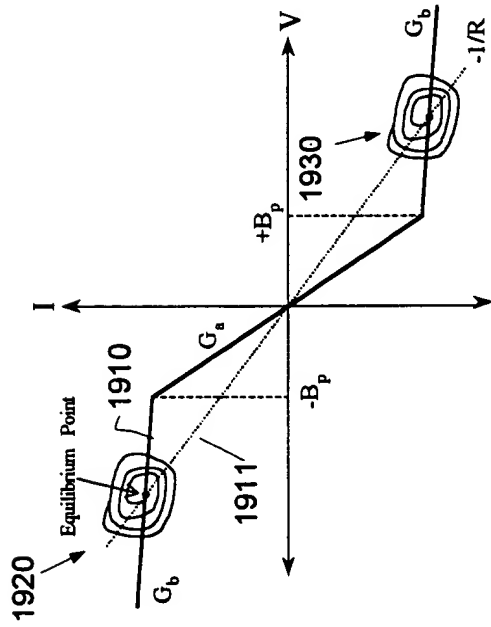


FIG. 19C

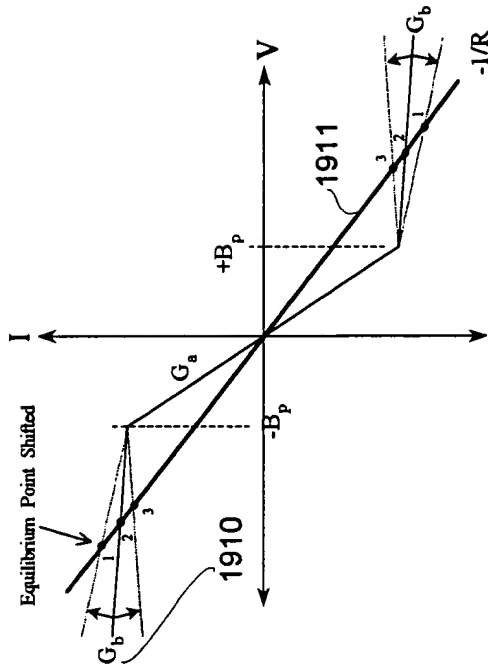


FIG. 19D

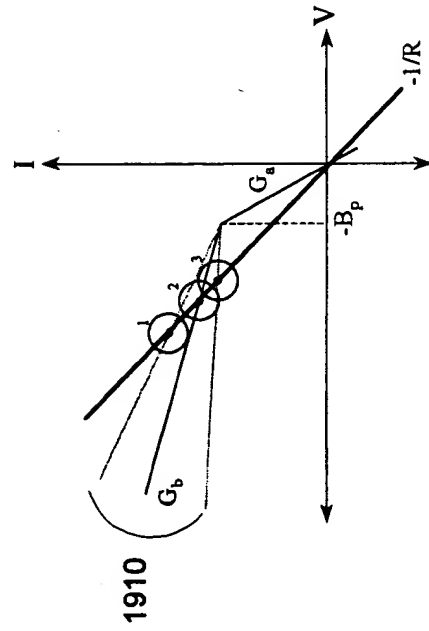


FIG. 19E

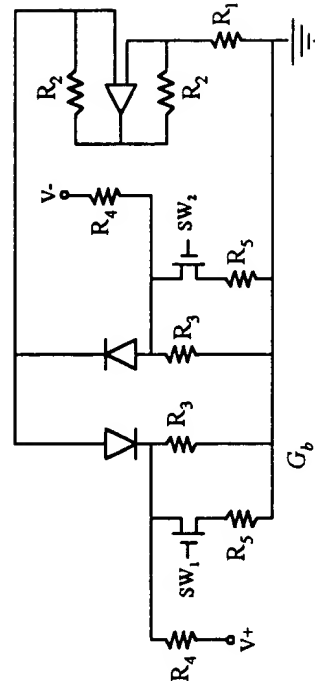


FIG. 19F

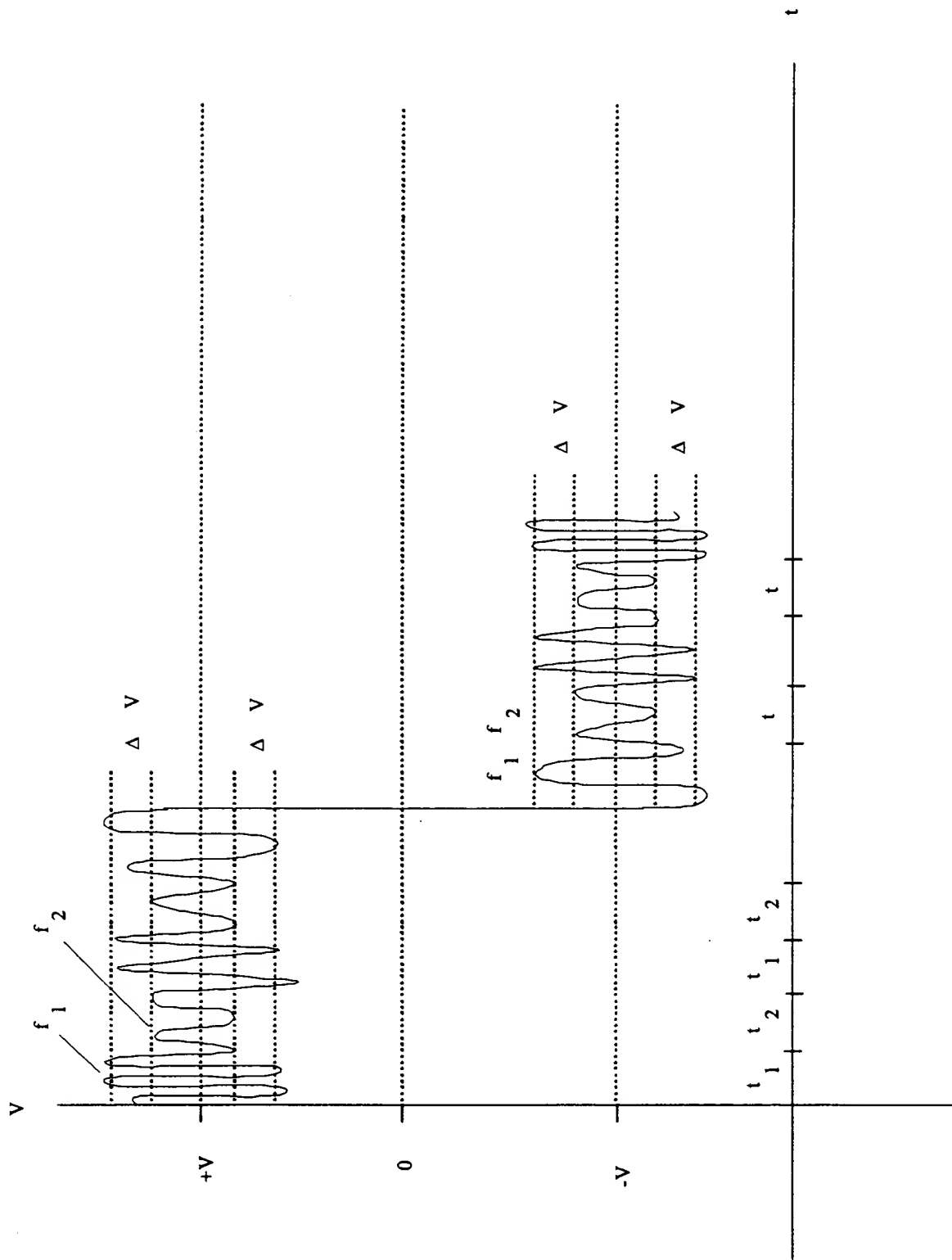


FIG. 19G



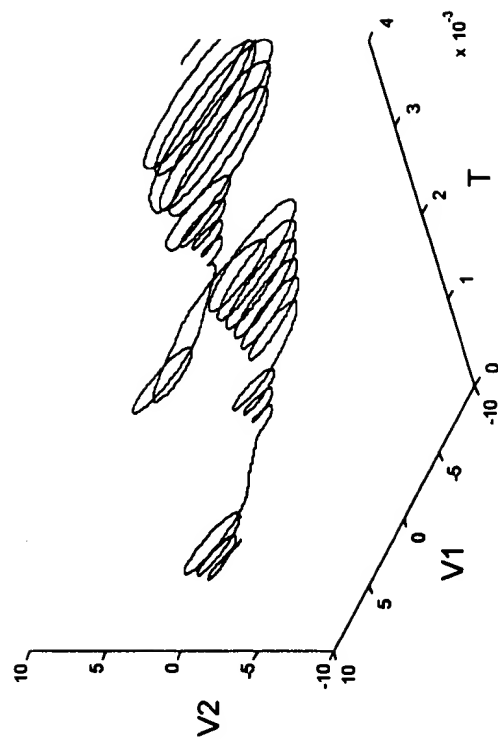


FIG. 20B

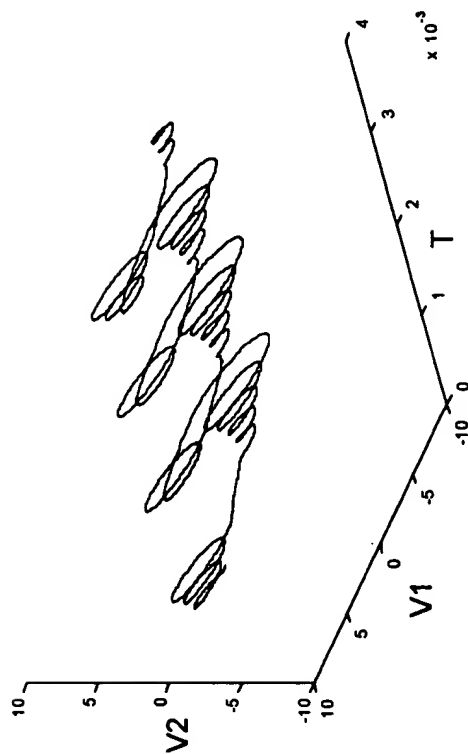


FIG. 20A

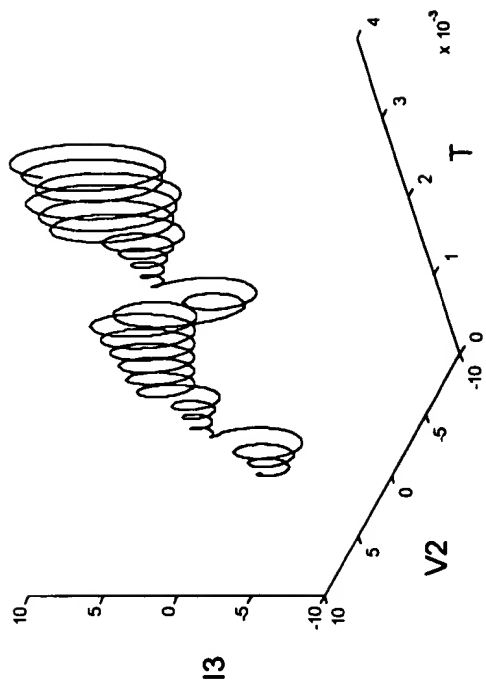


FIG. 20C

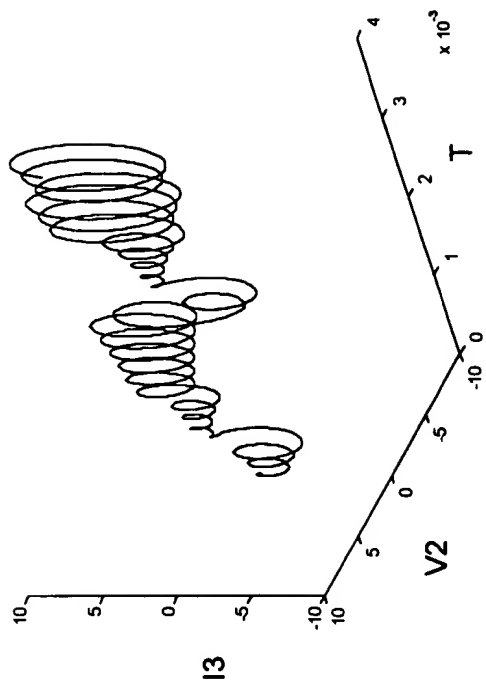


FIG. 20D

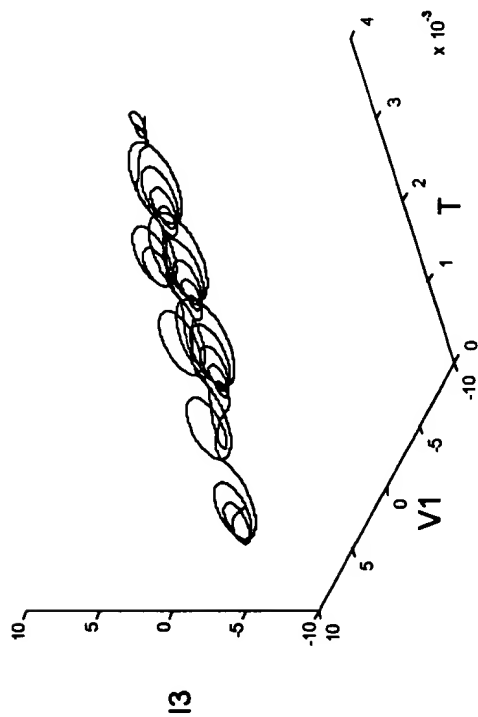


FIG. 20E

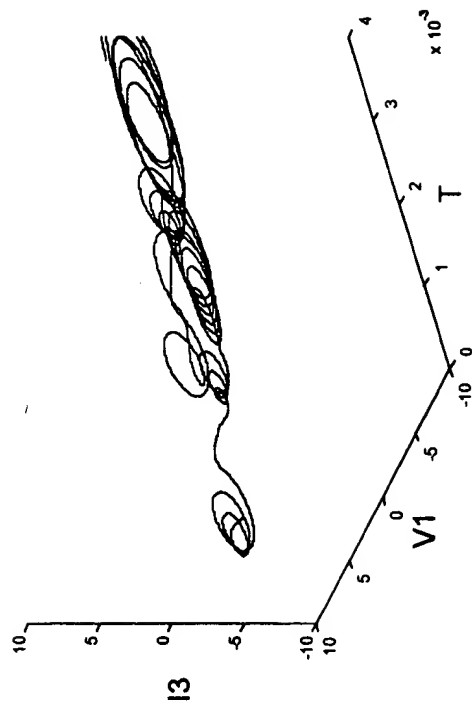


FIG. 20F

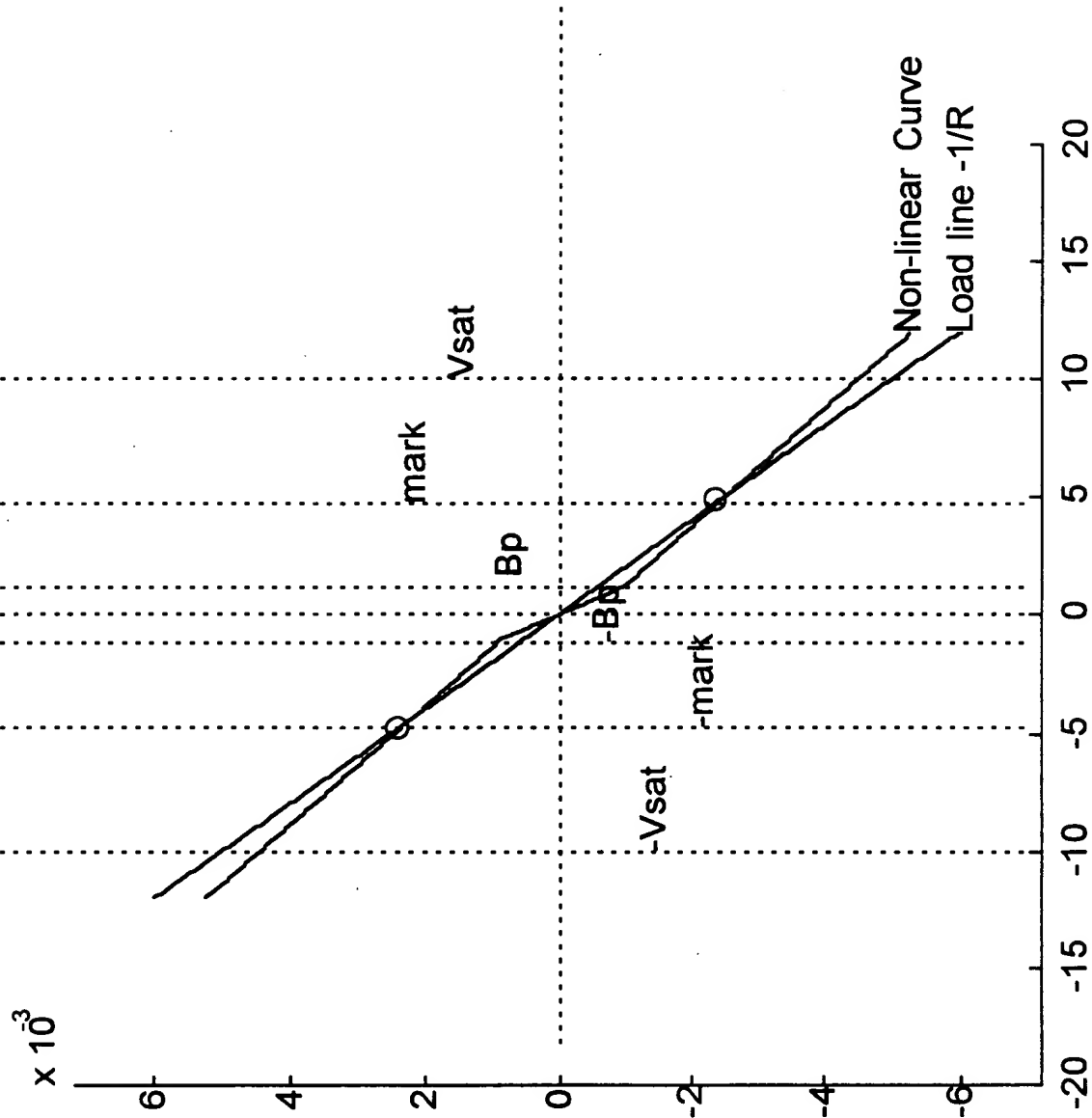


FIG. 21A

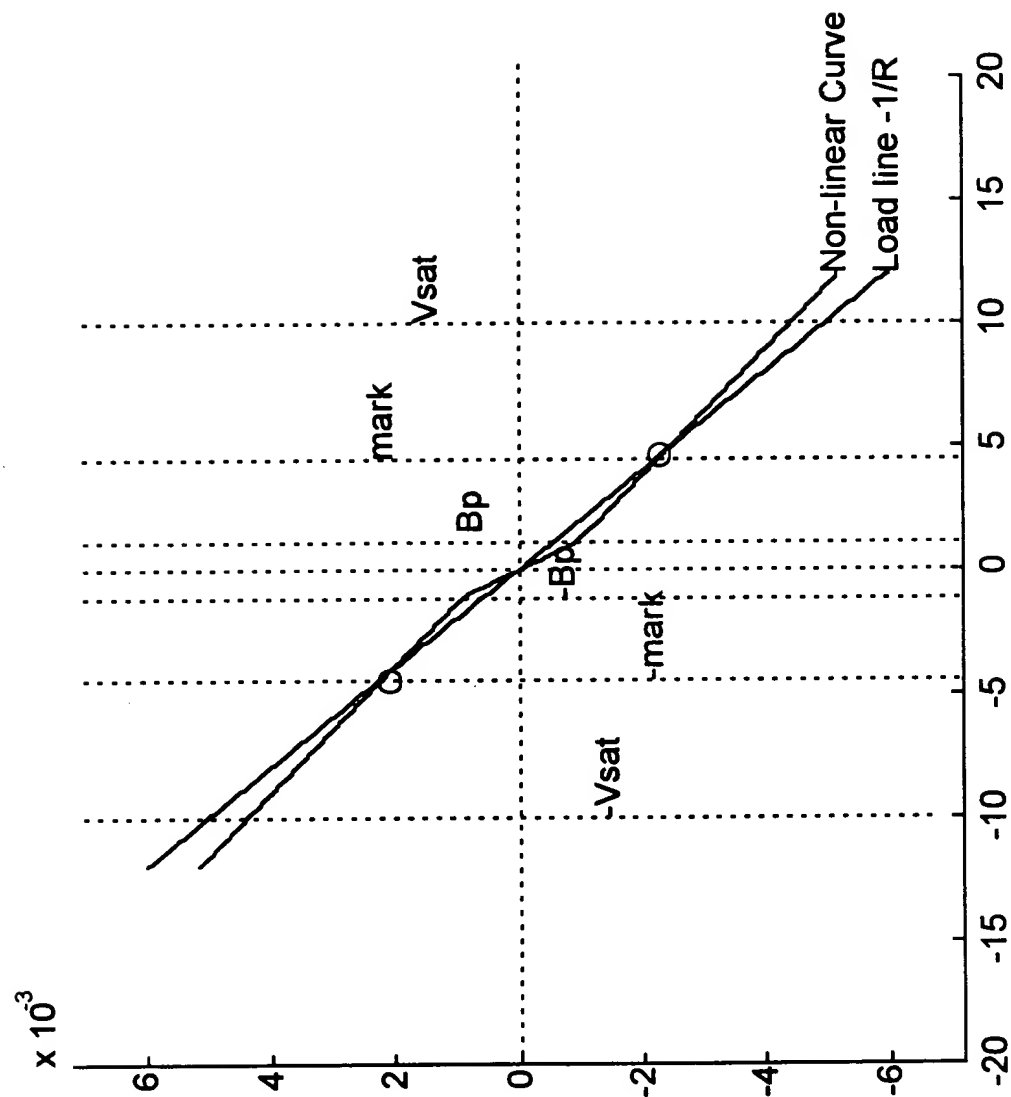


FIG. 21B

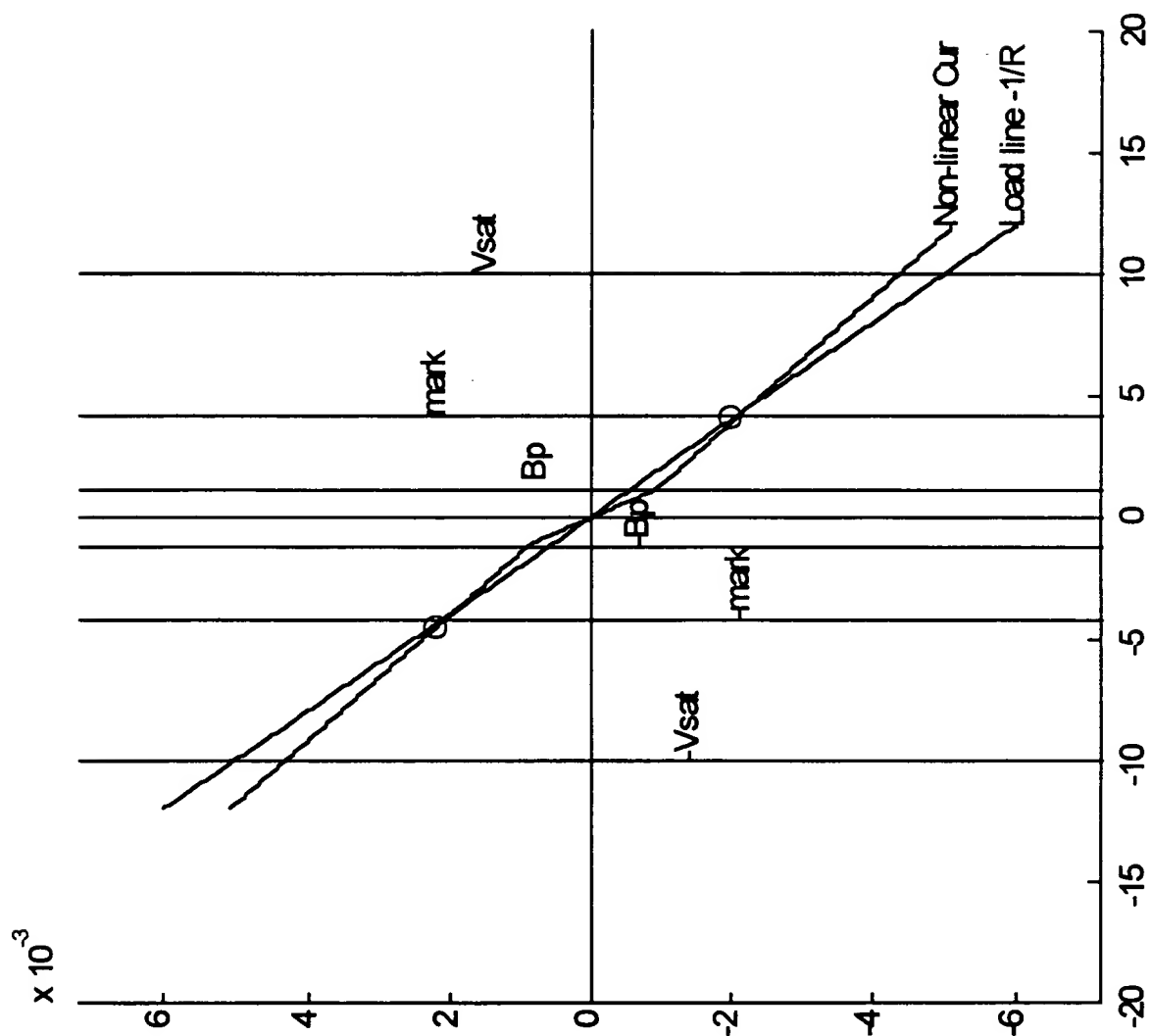


FIG. 21C

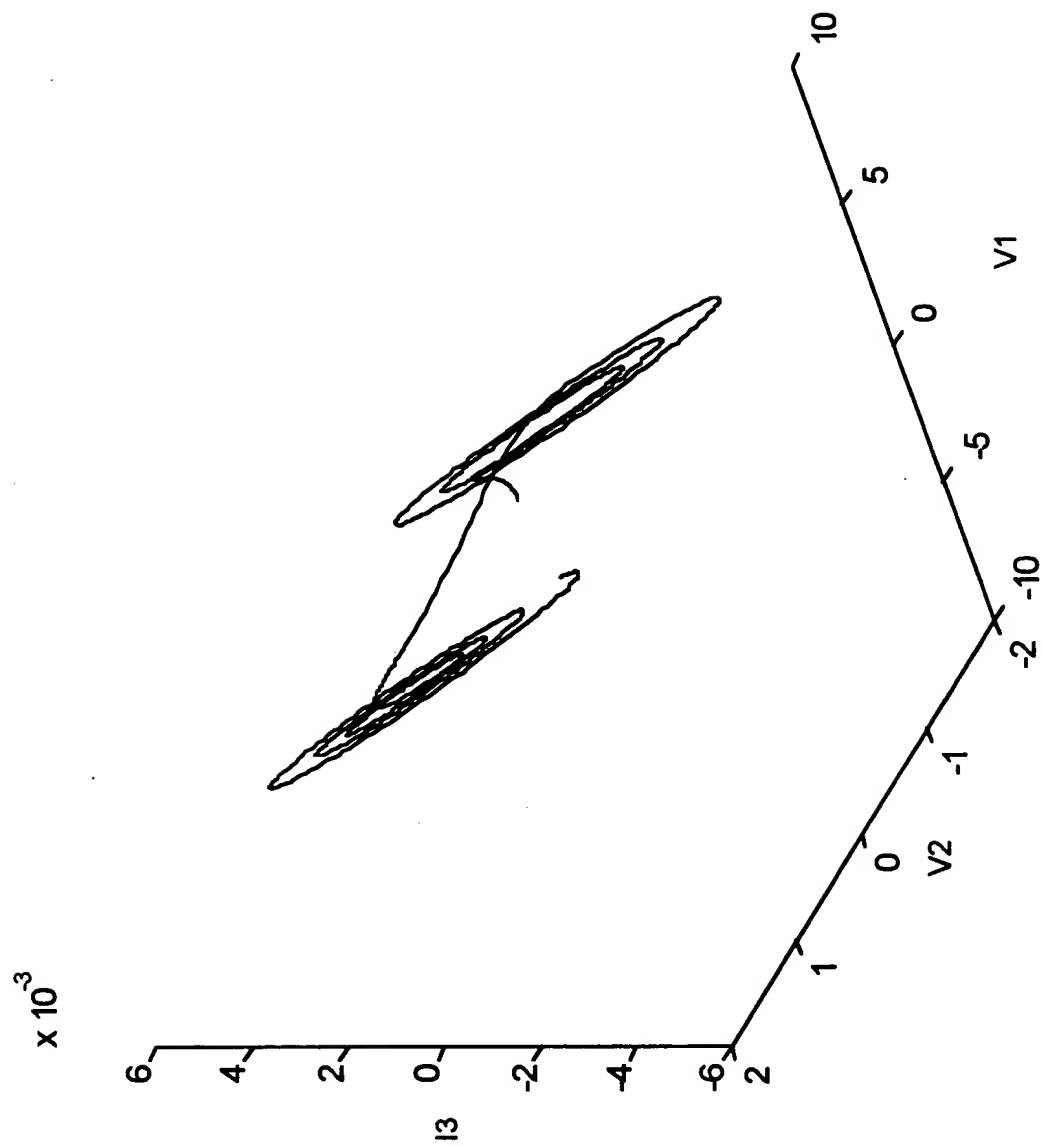


FIG. 21D

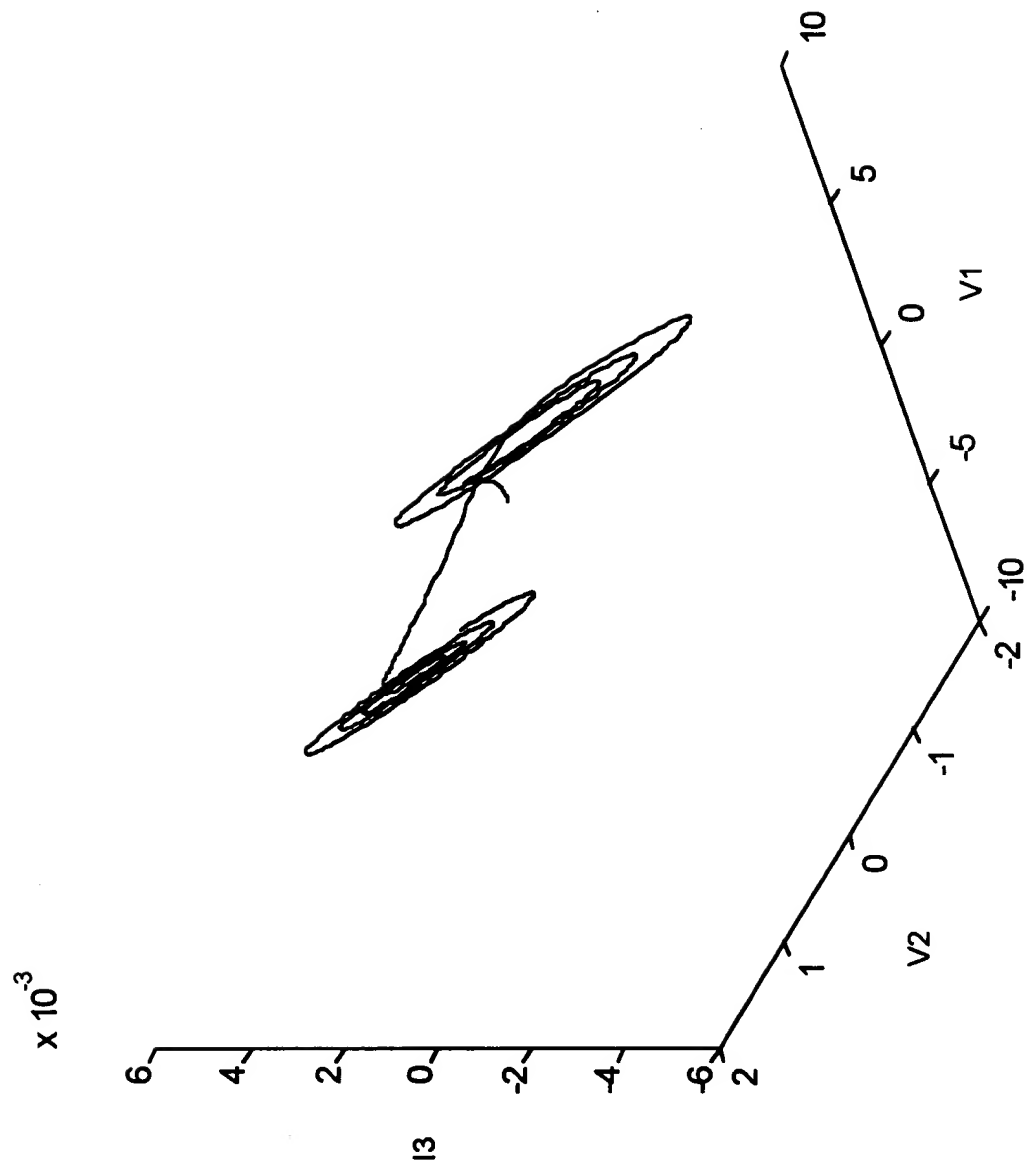


FIG. 21E



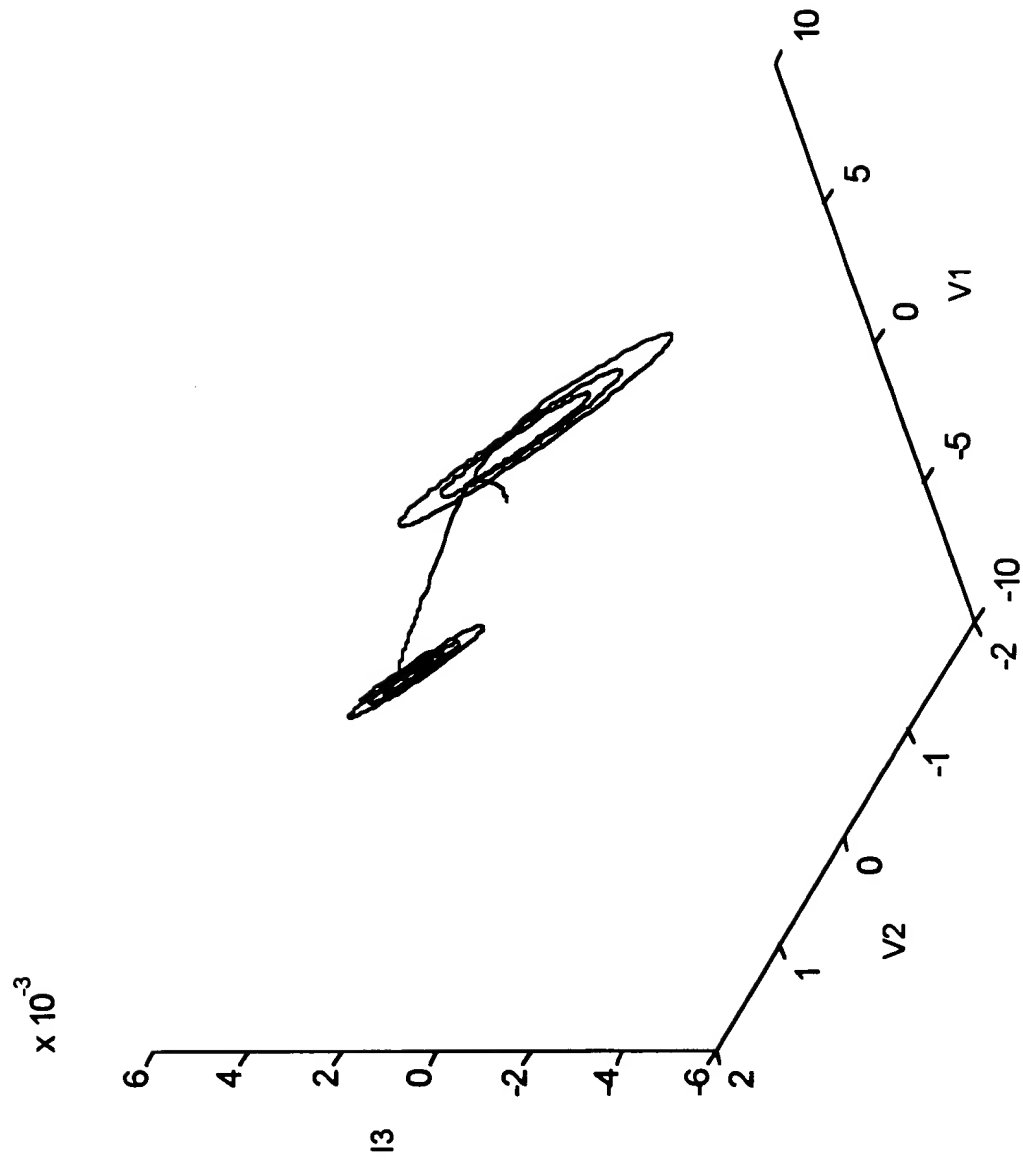


FIG. 21F

6674350" 72376720

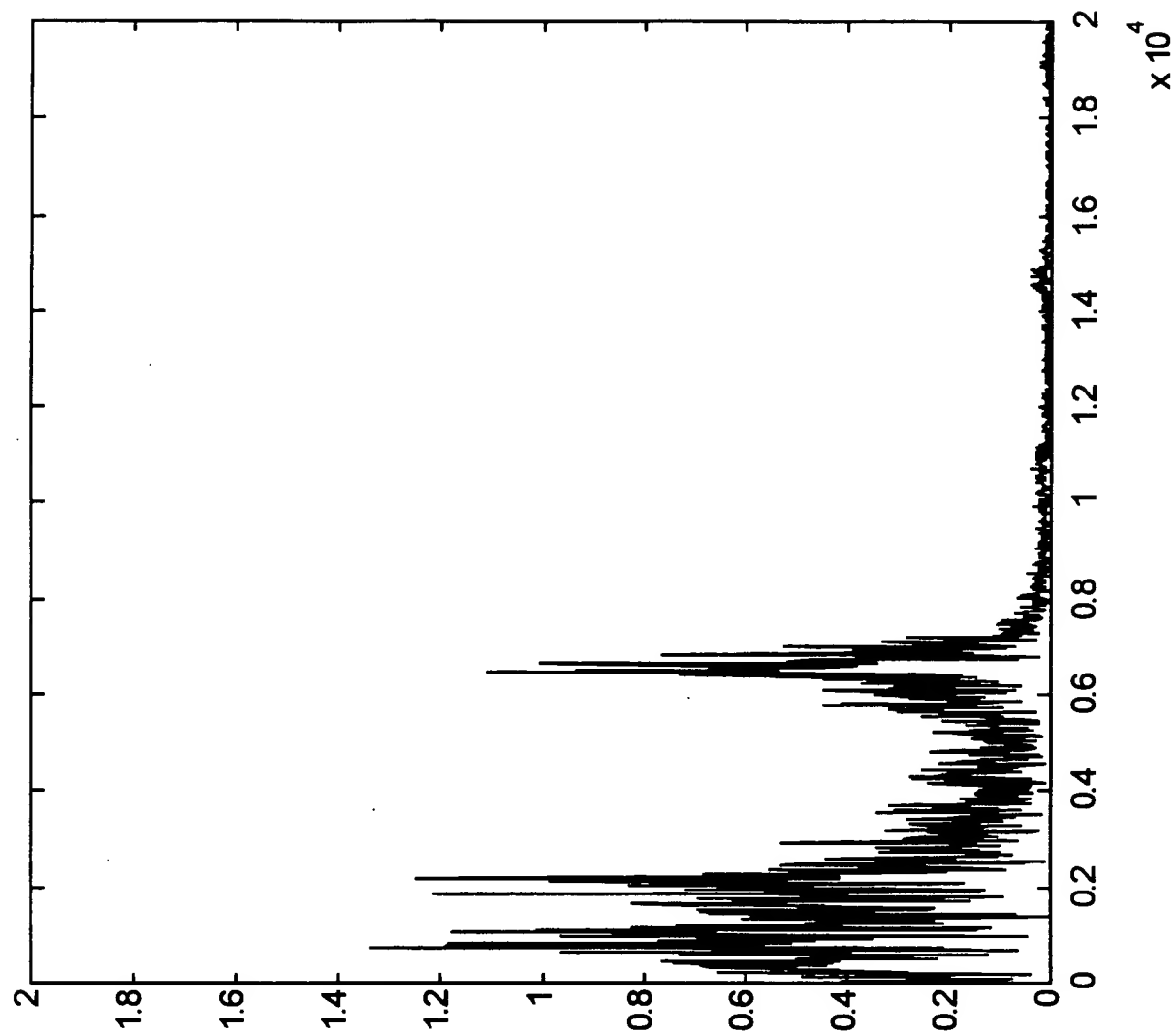


FIG. 21G

CONFIDENTIAL

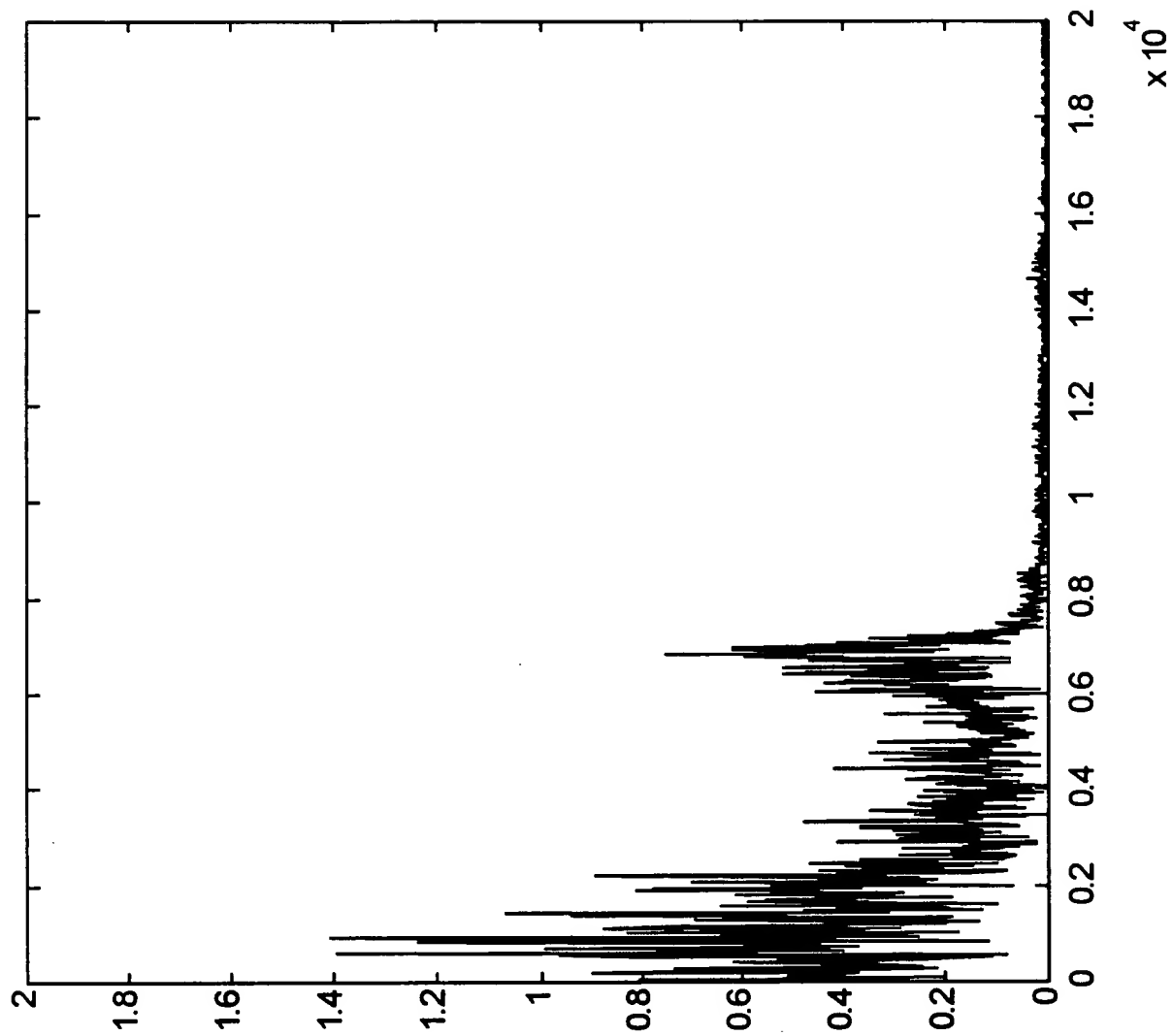


FIG. 21H

05-17-80 "T2T 6T 60"

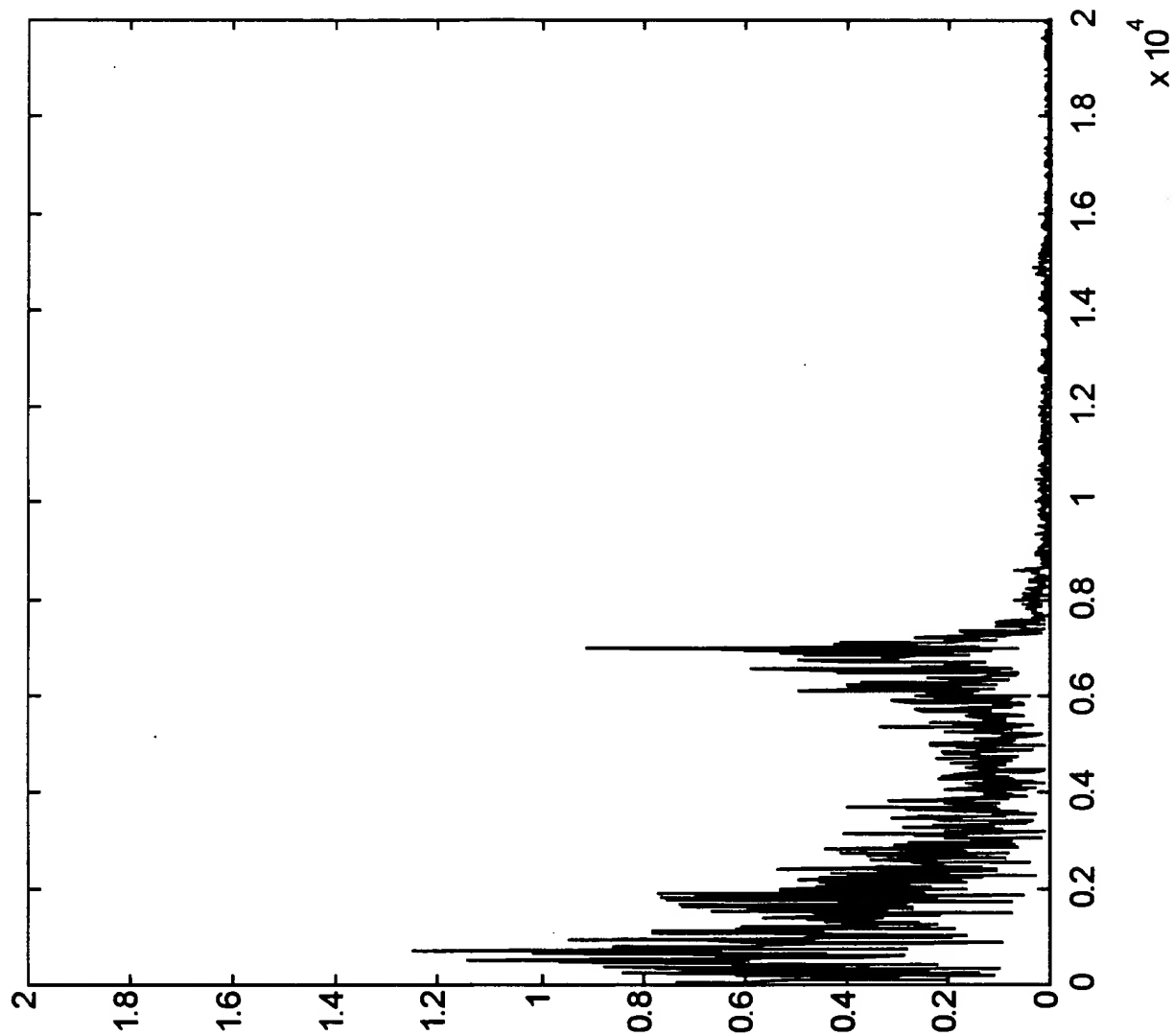


FIG. 21I

Modulation

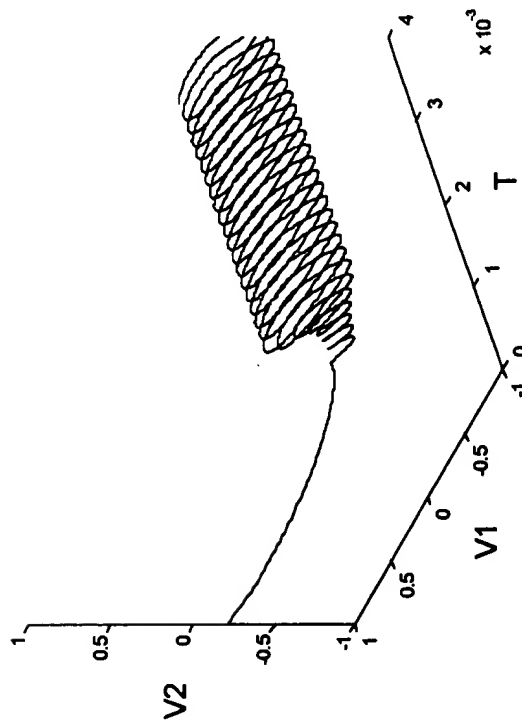


FIG. 22A

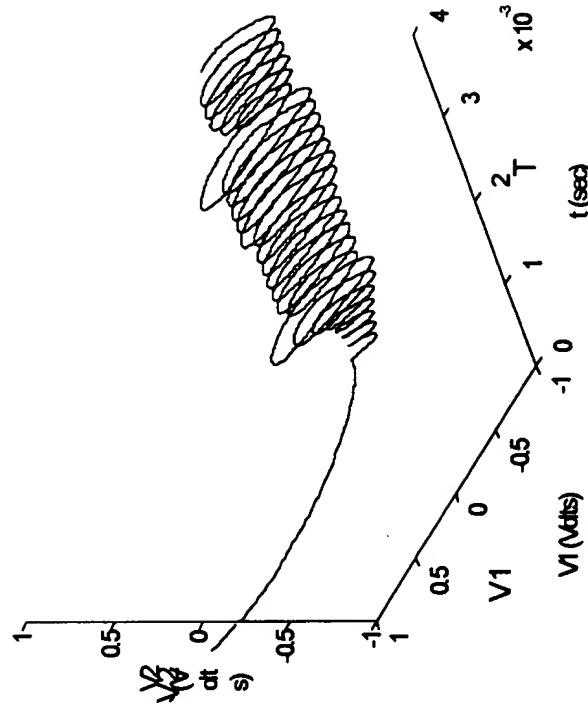


FIG. 22B

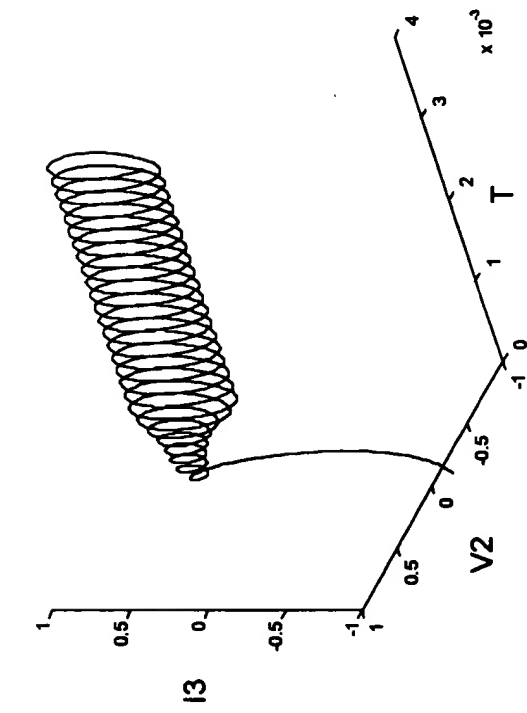


FIG. 22C

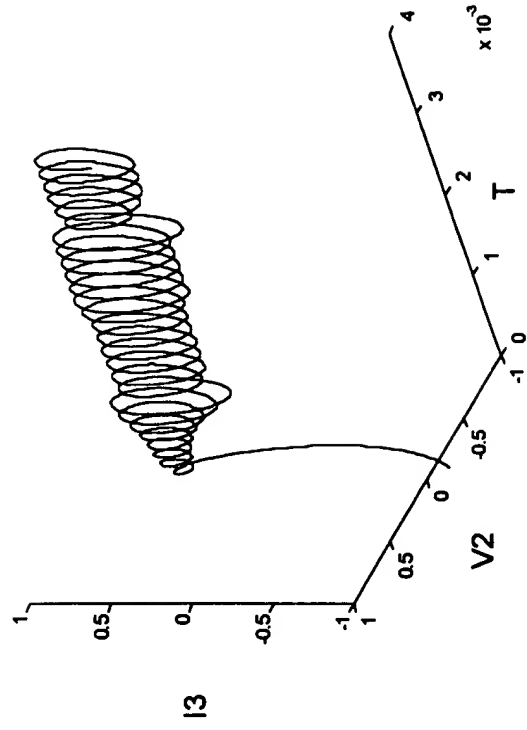


FIG. 22D

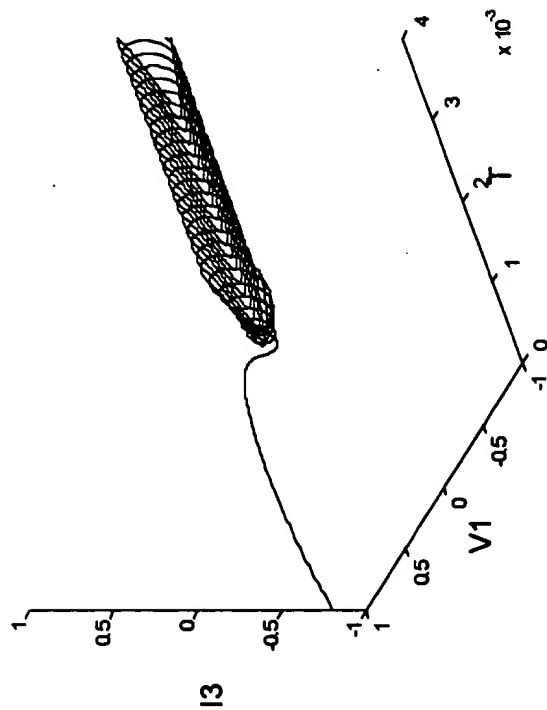


FIG. 22E

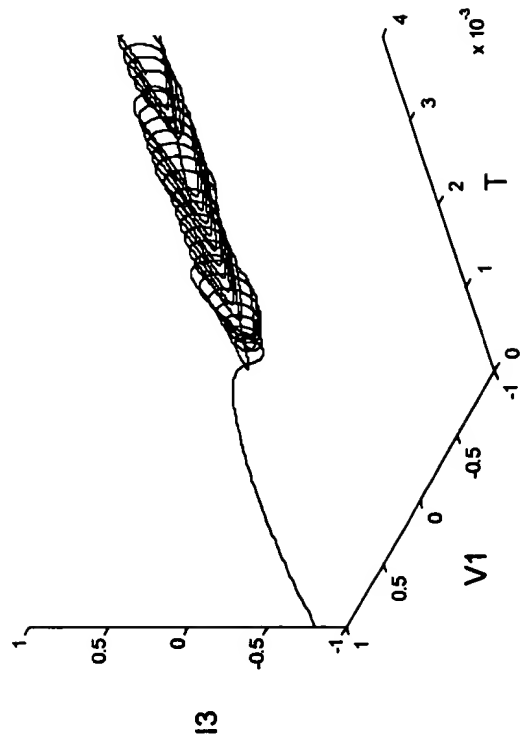


FIG. 22F

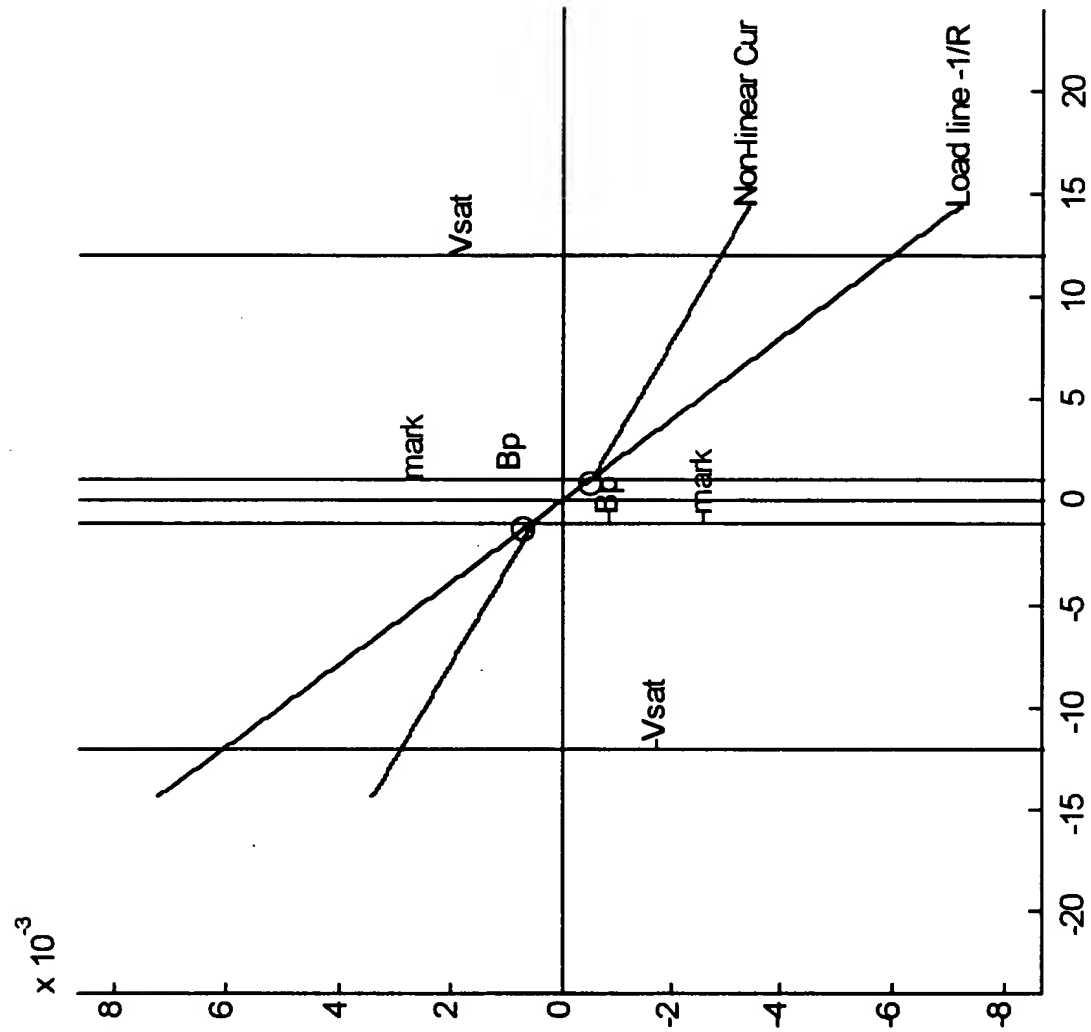


FIG. 23A



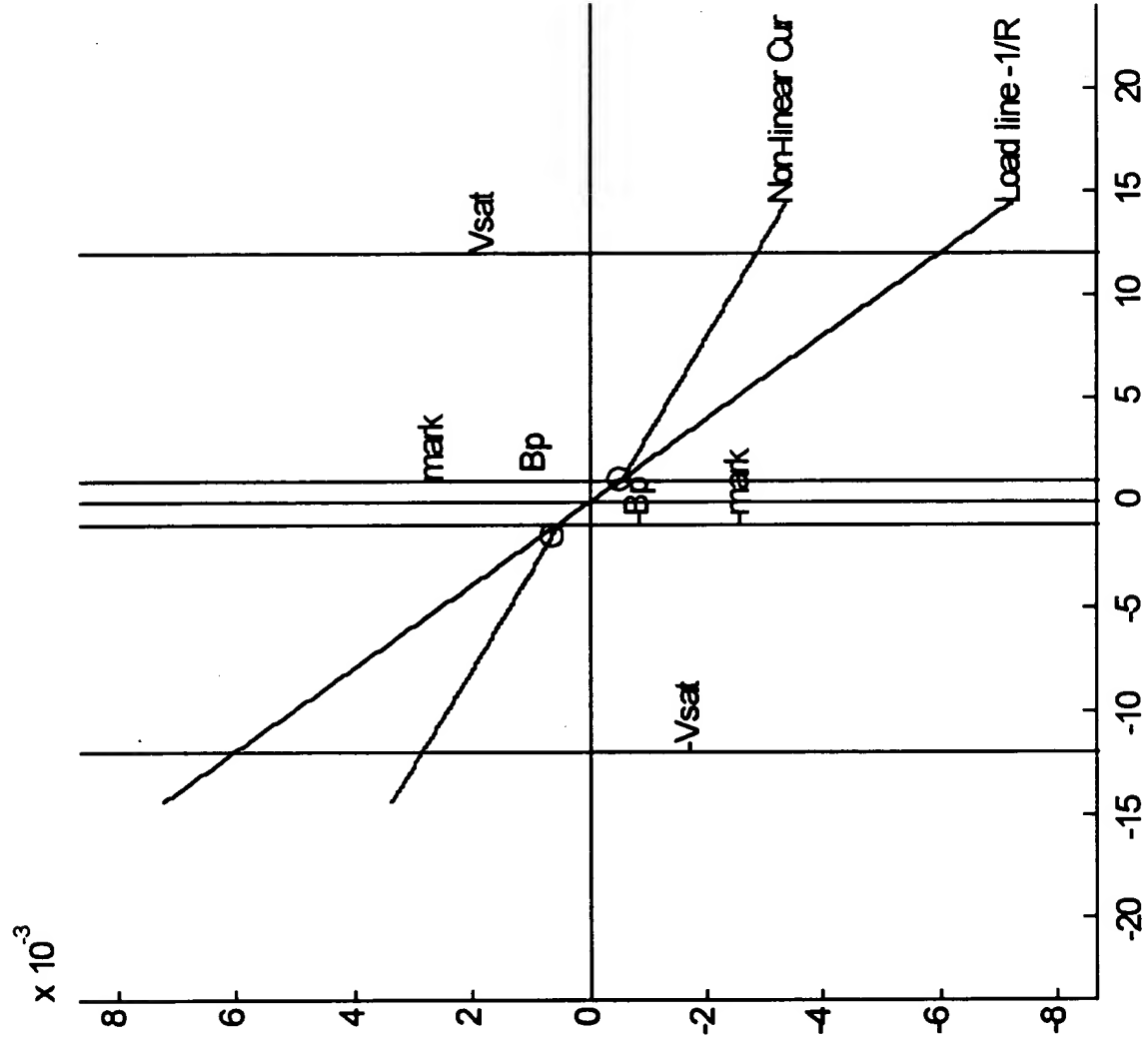


FIG. 23B

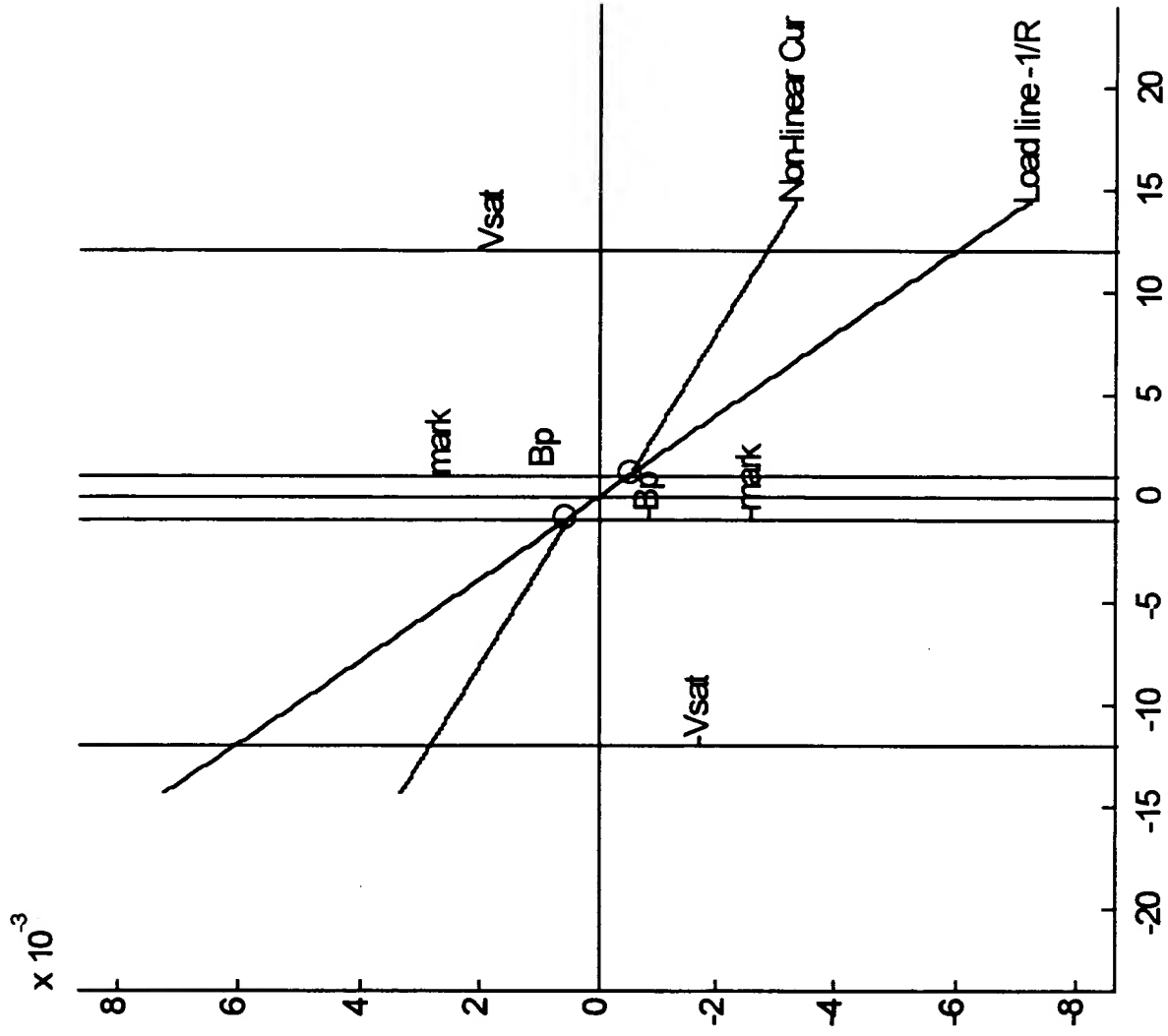


FIG. 23C

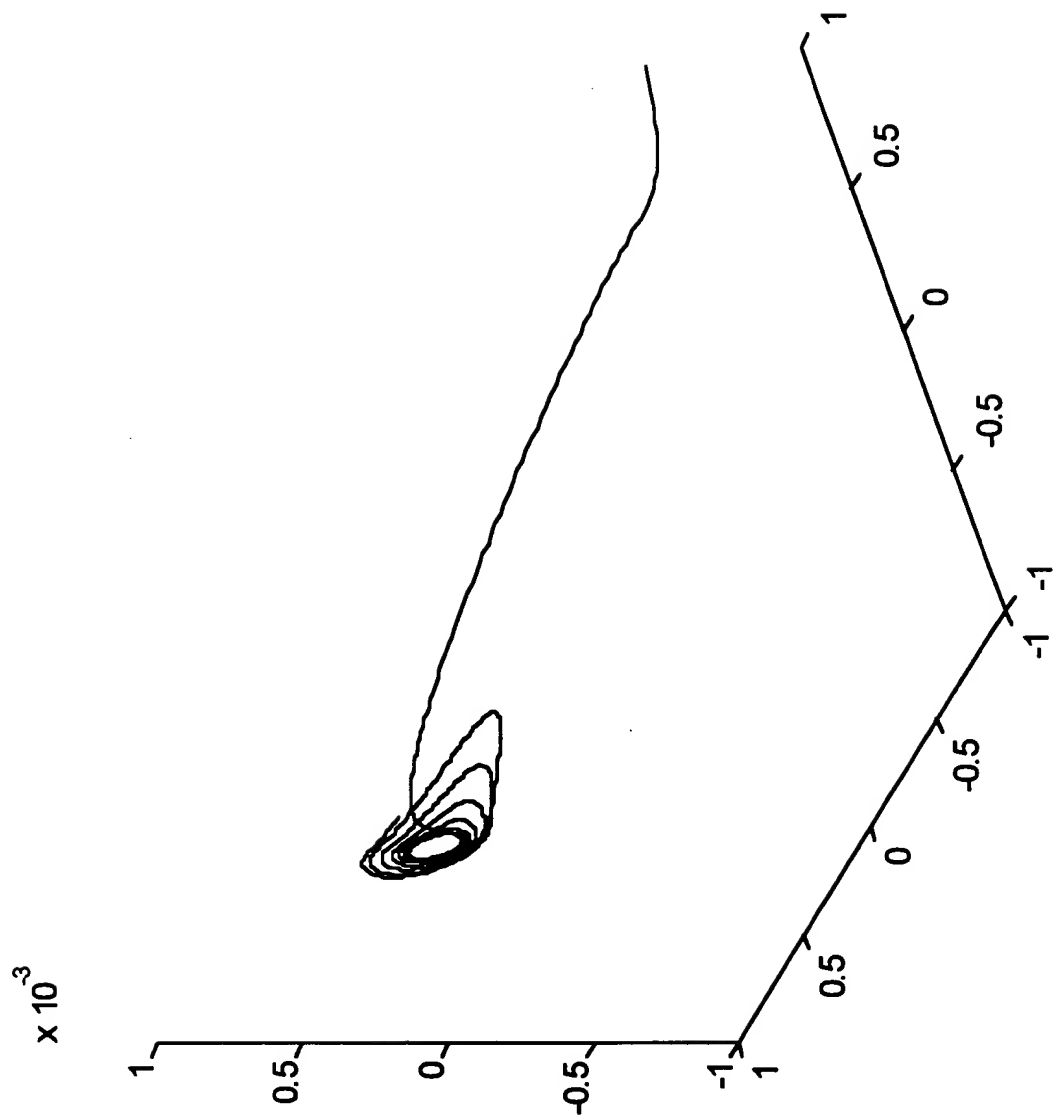


FIG. 23D

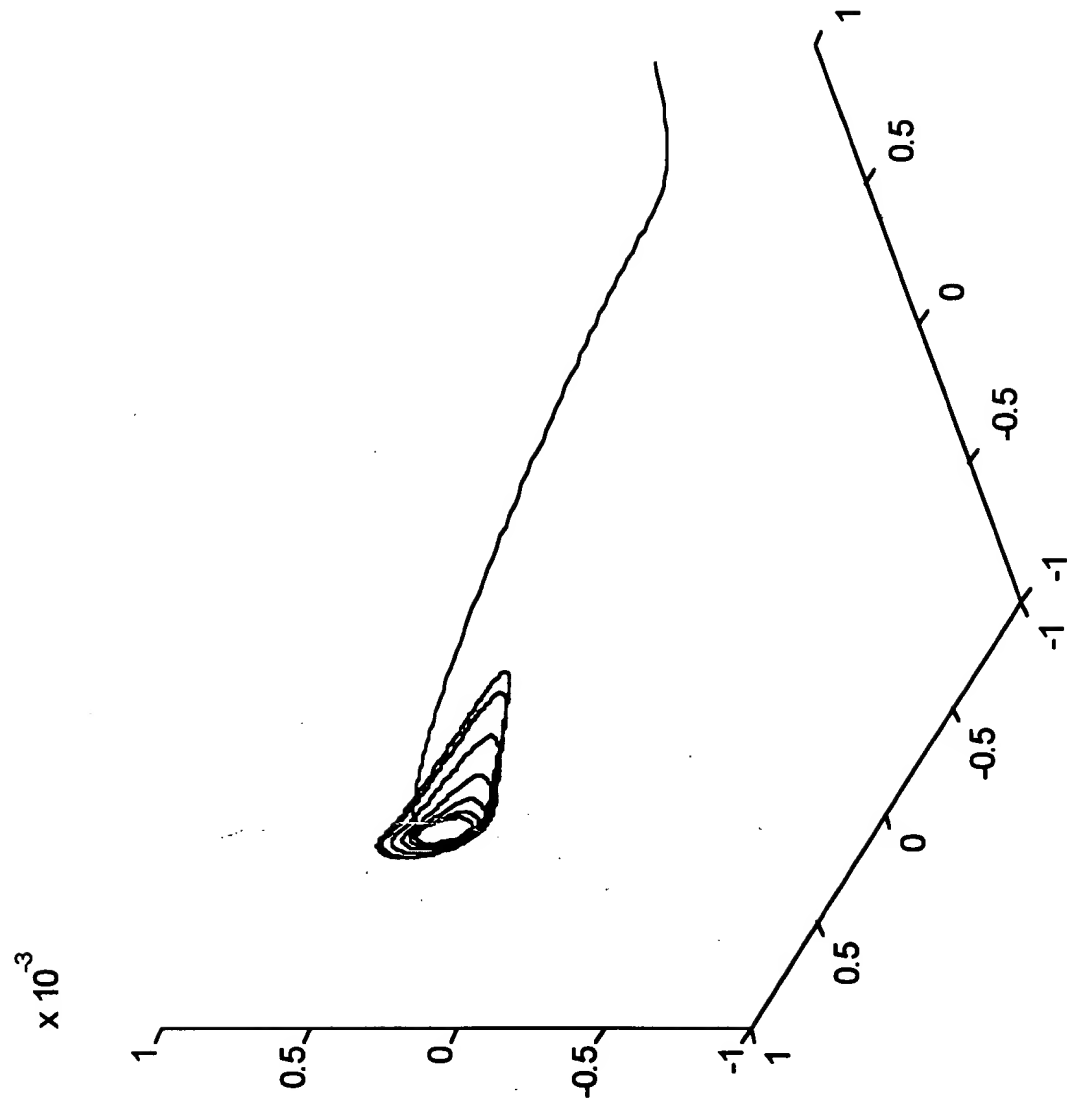


FIG. 23E

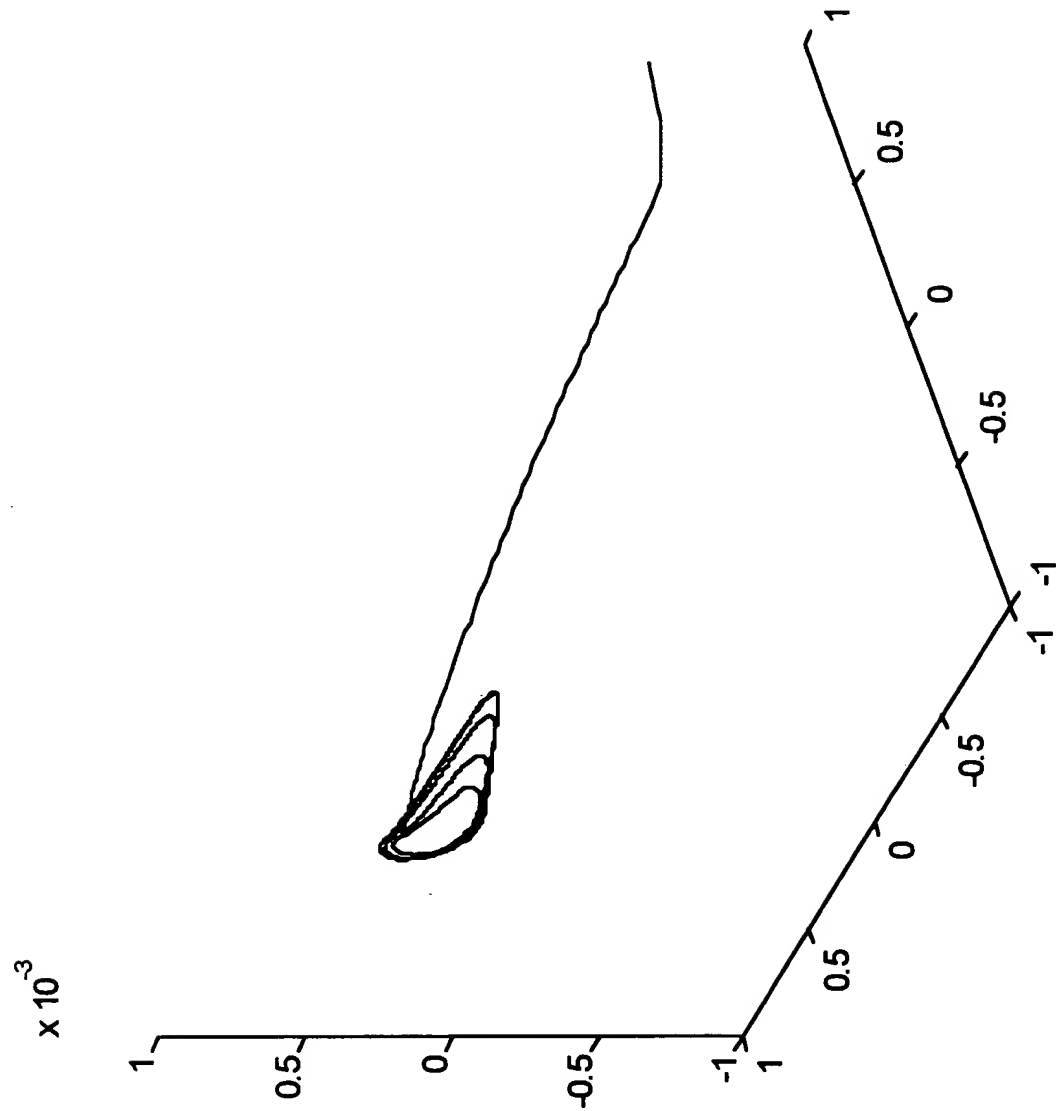


FIG. 23F

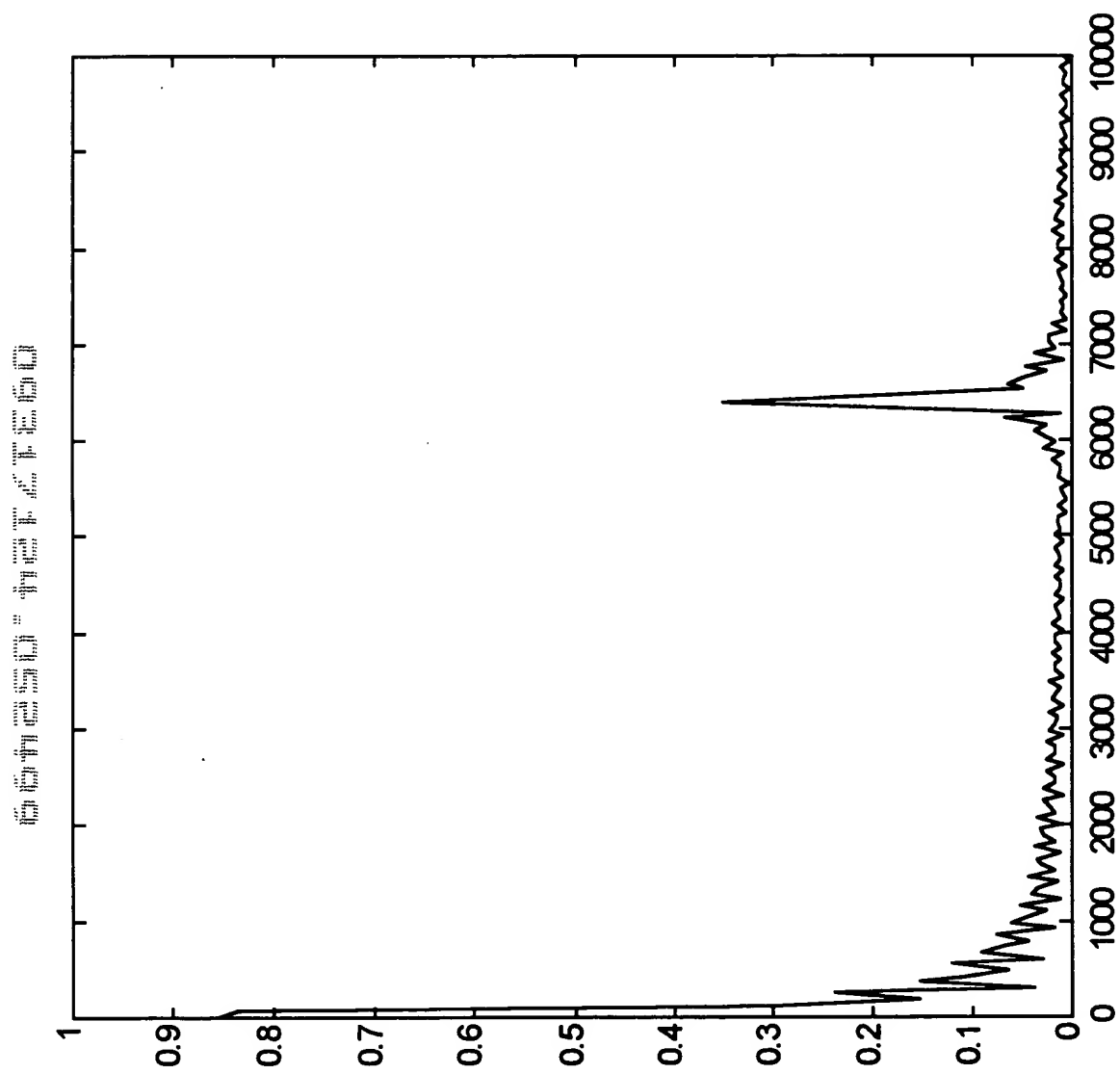


FIG. 23G

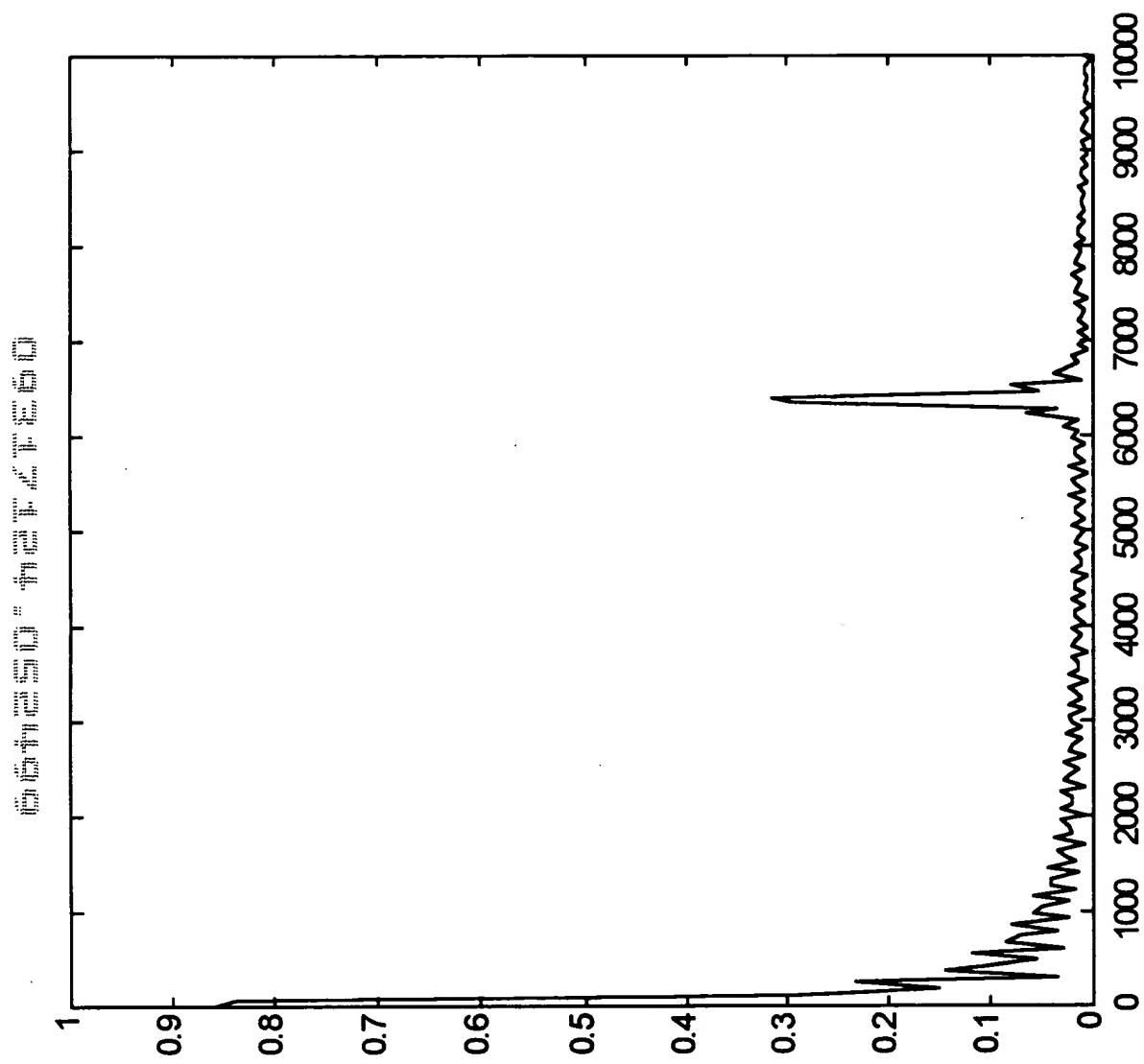


FIG. 23H

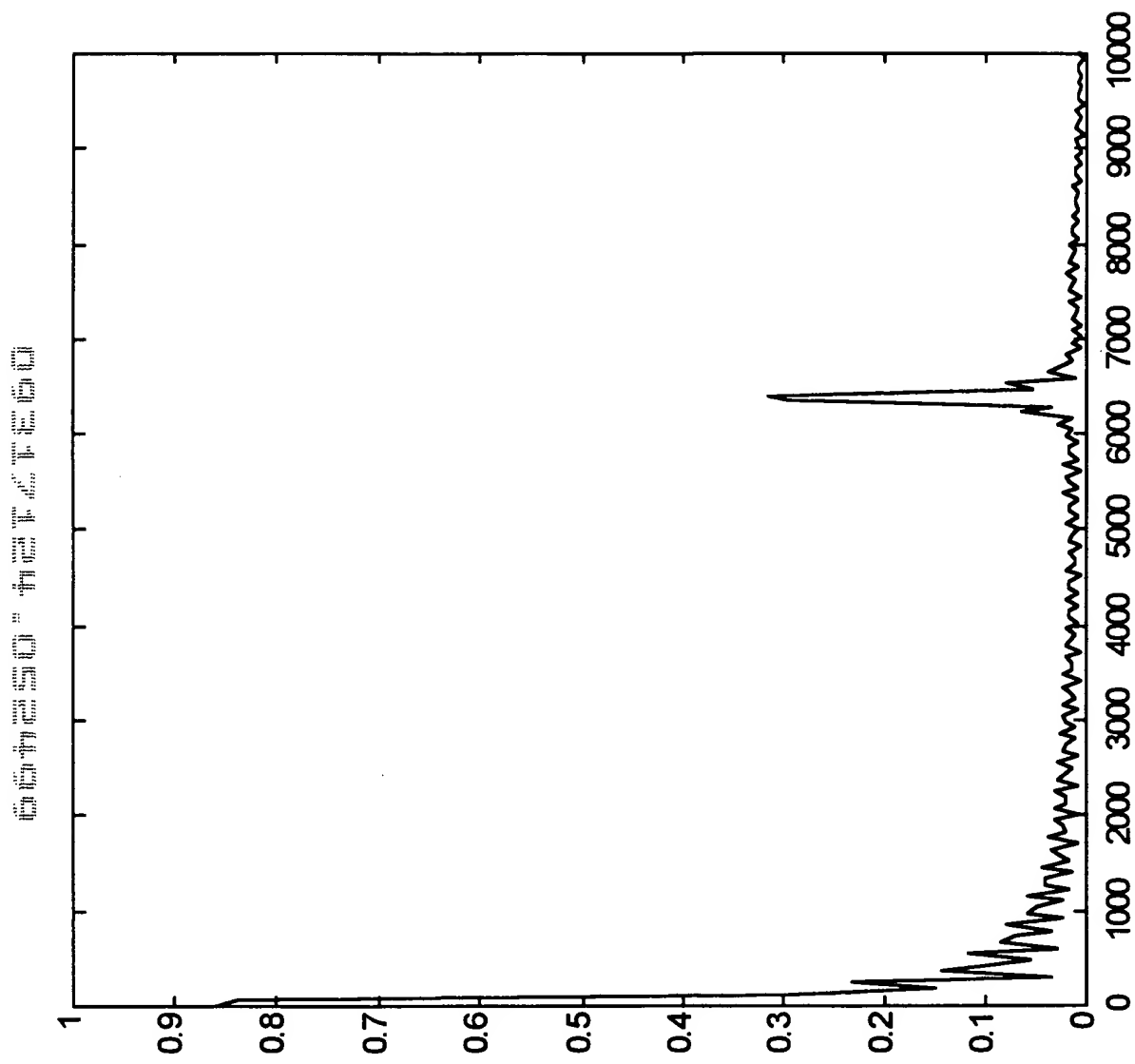
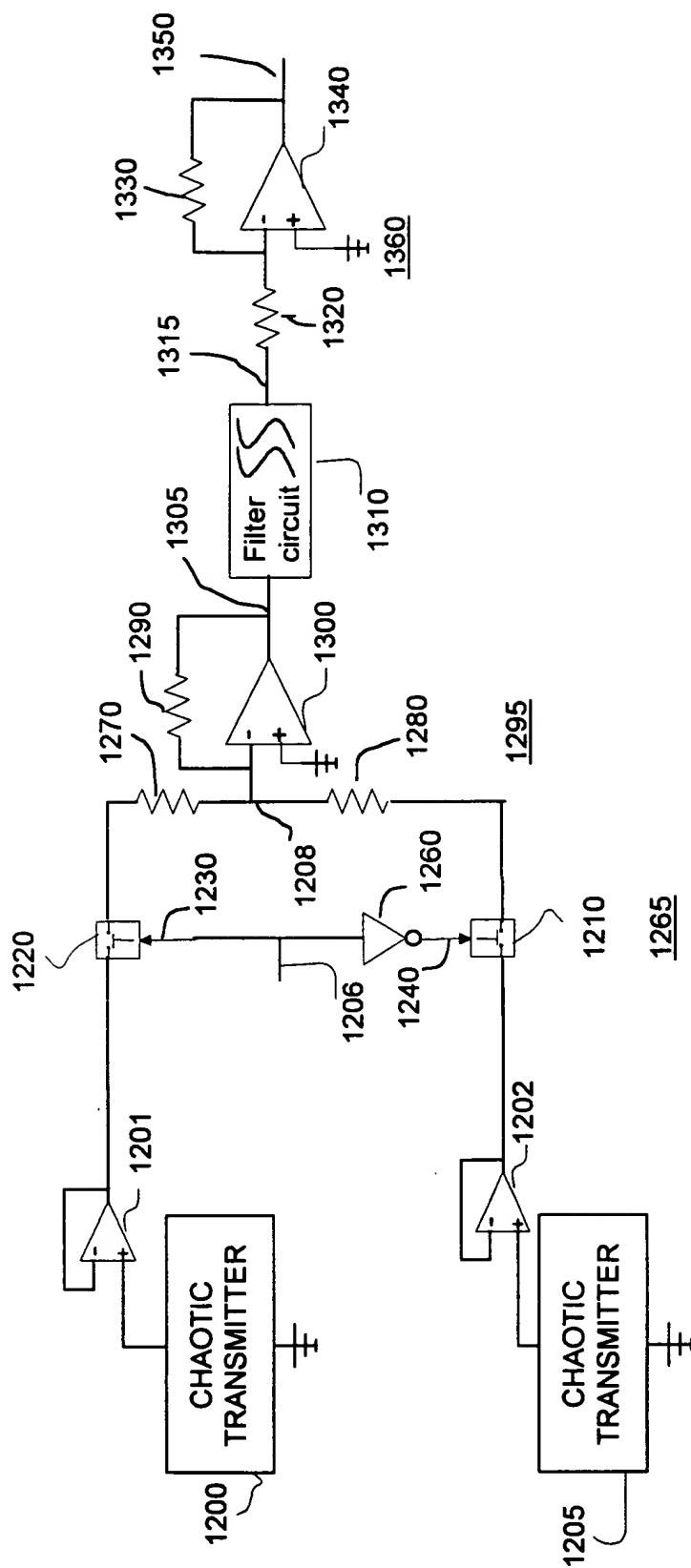
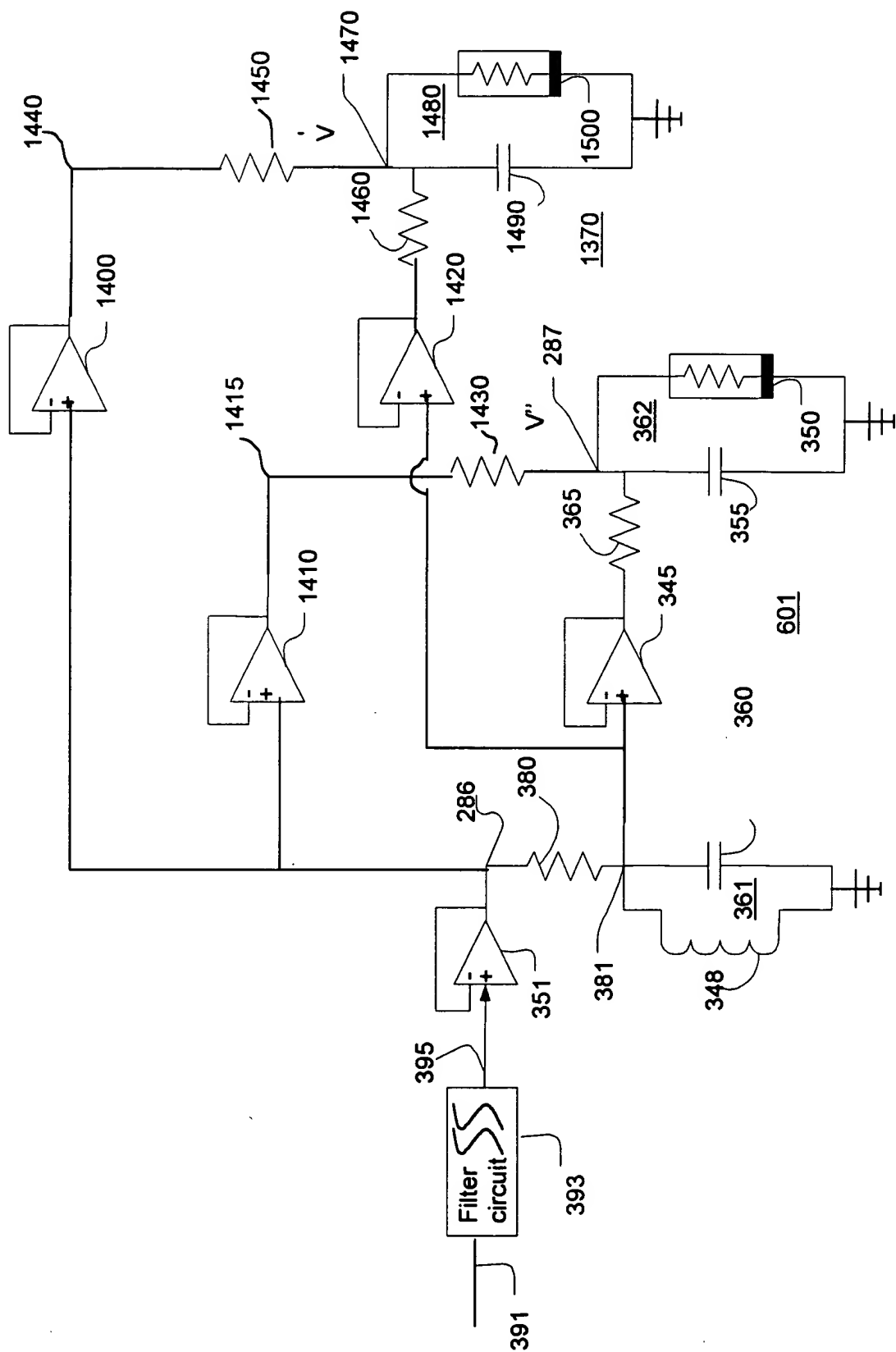


FIG. 23I





**FIG. 24**



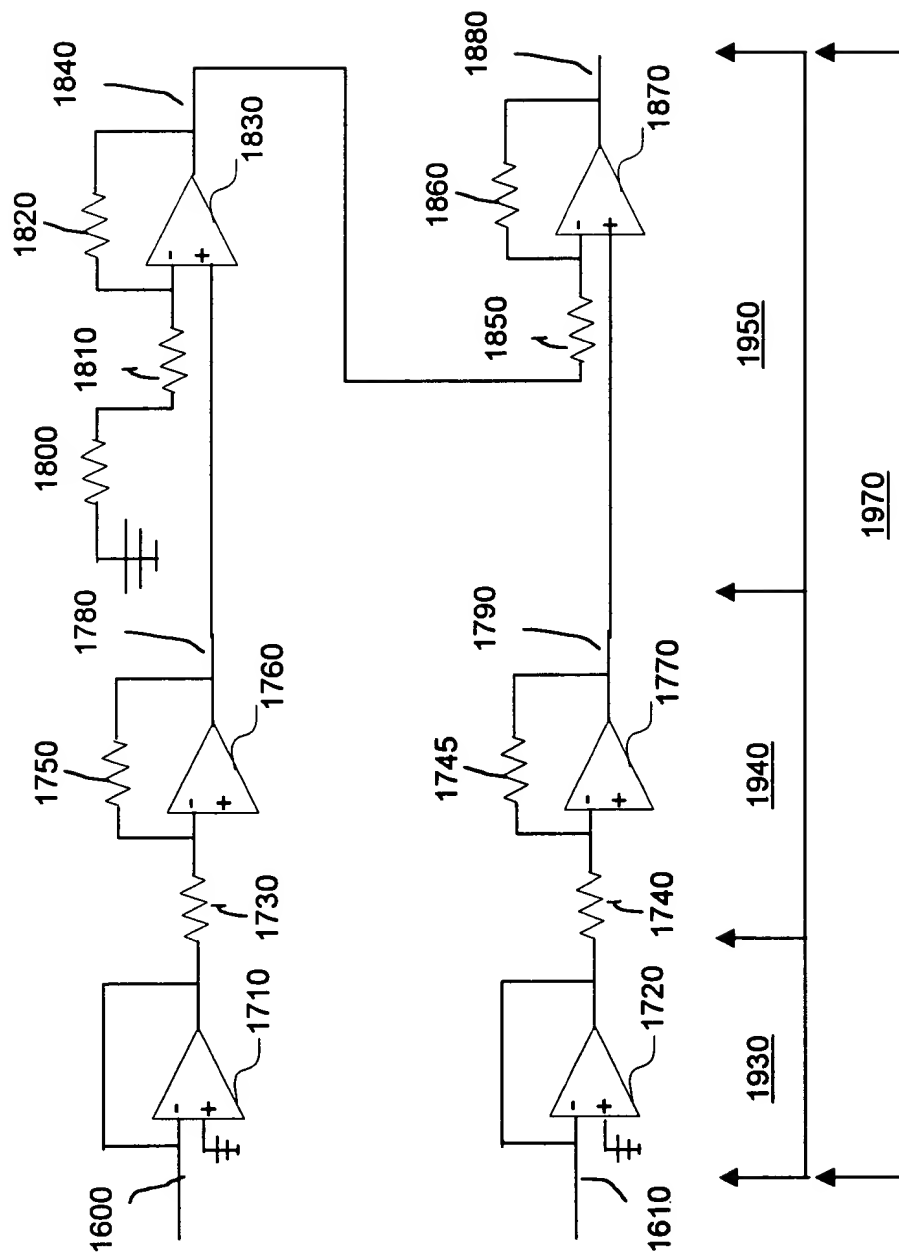


FIG. 26

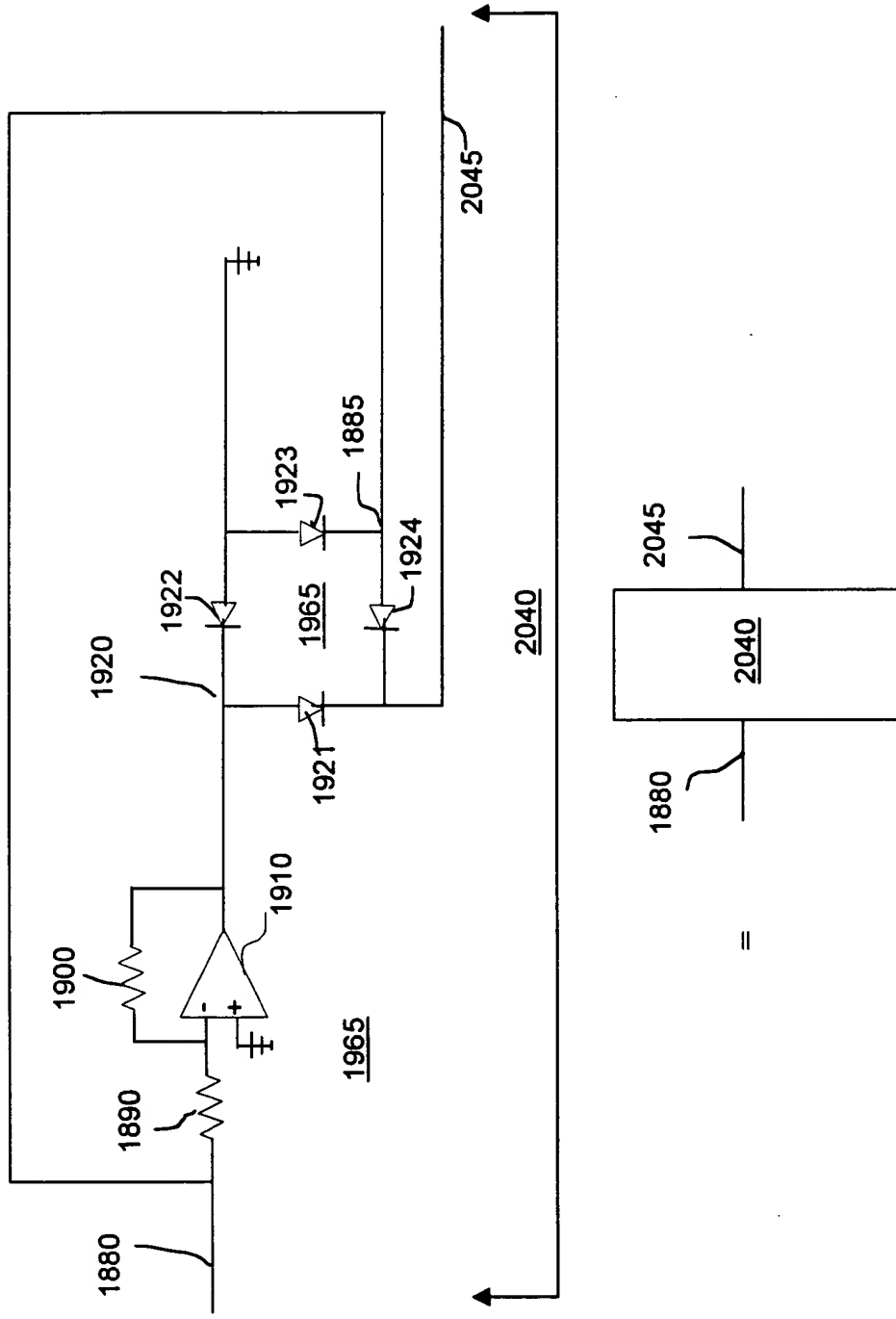


FIG. 27

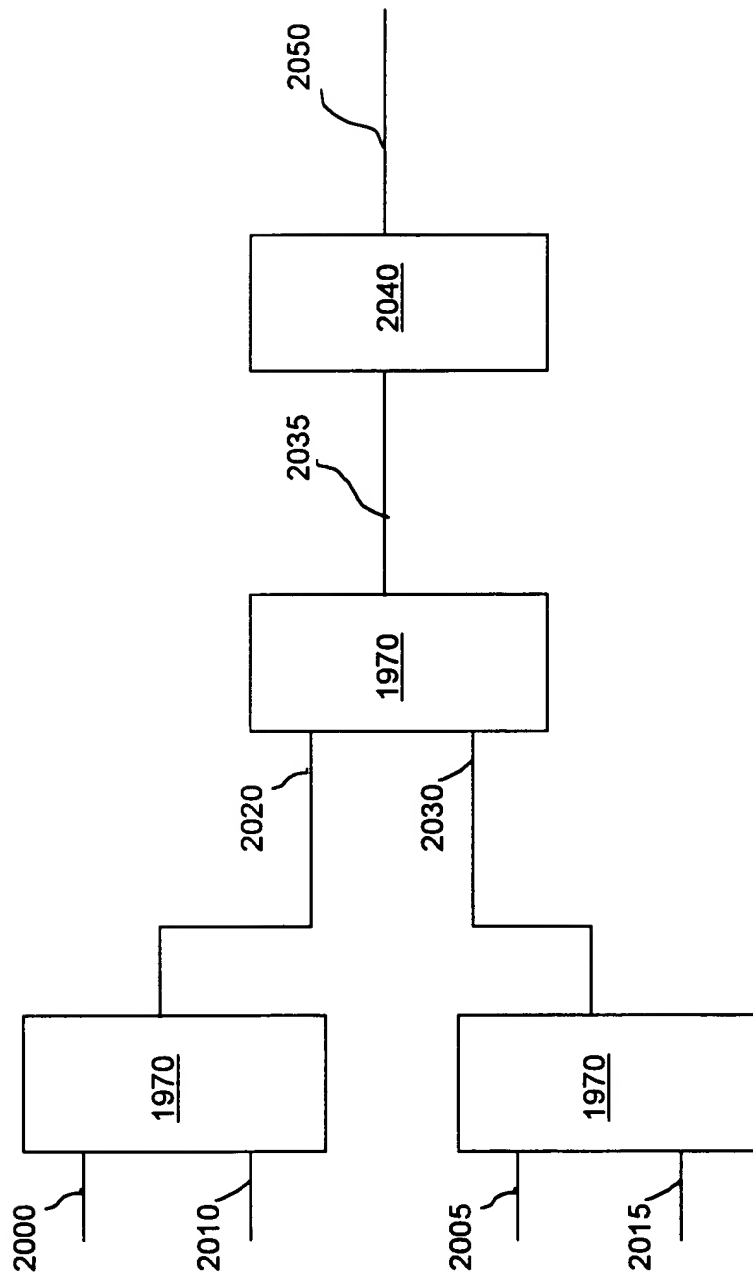


FIG. 28

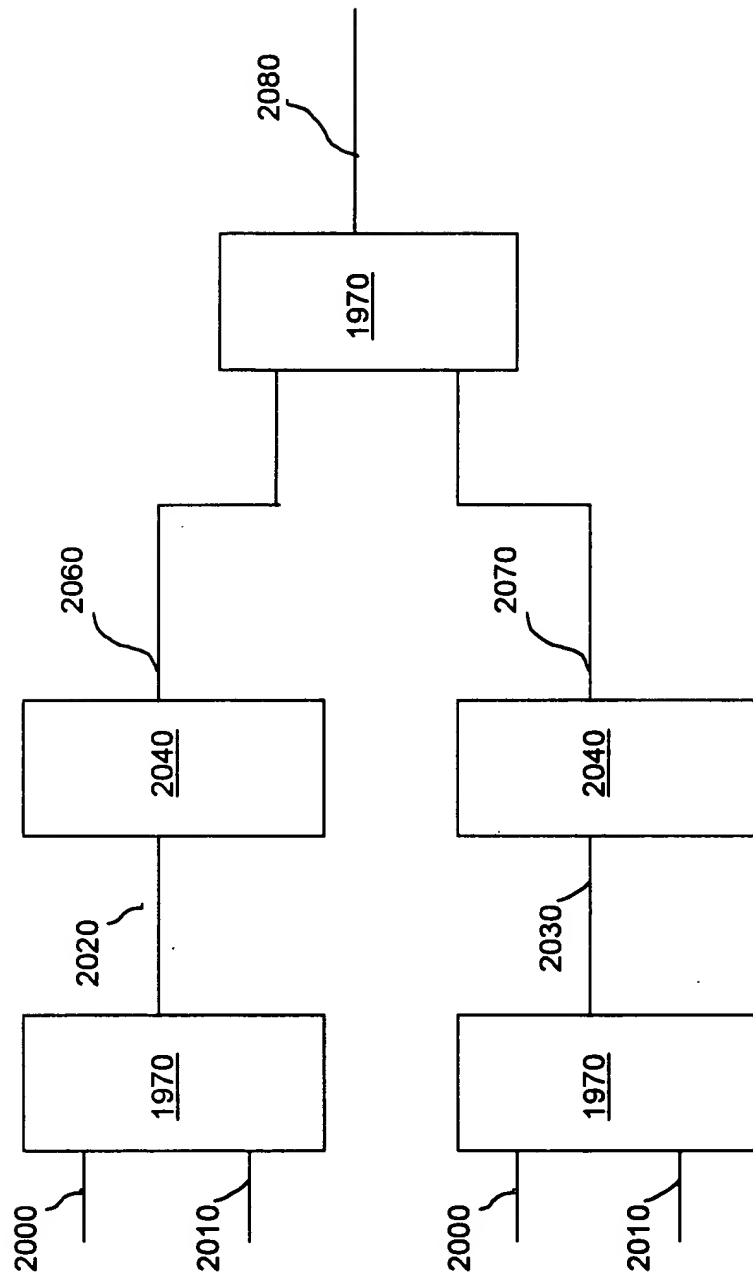


FIG. 29

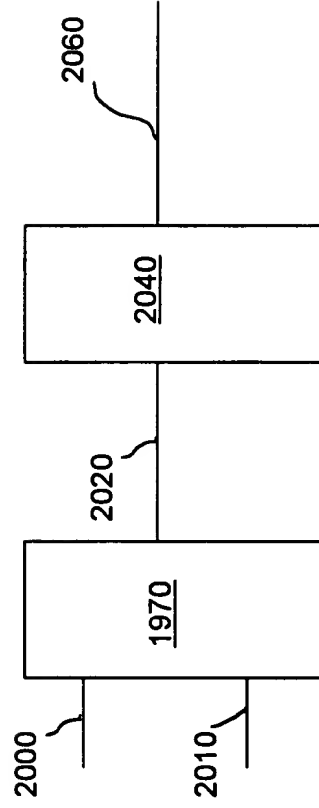


FIG. 30

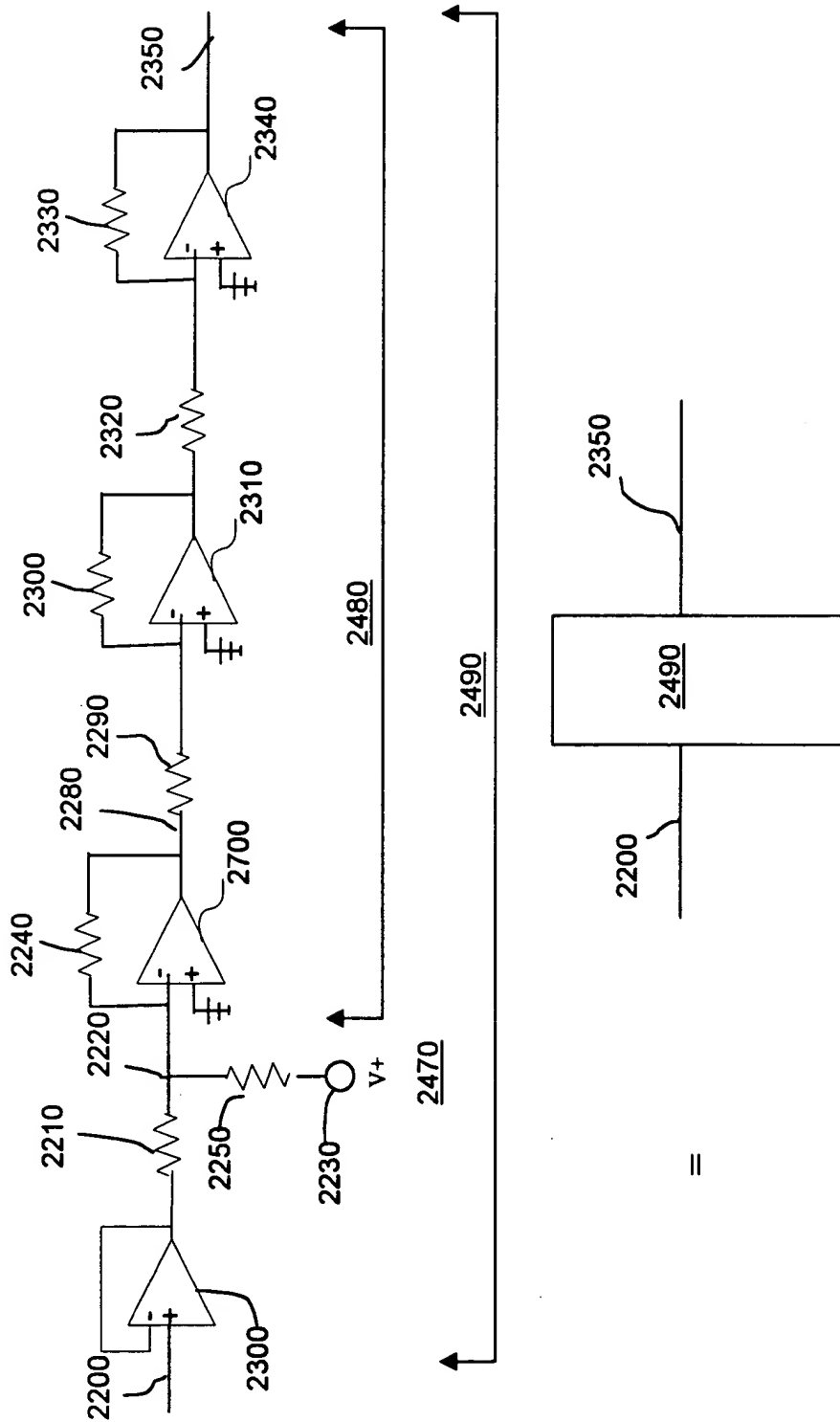


FIG. 31



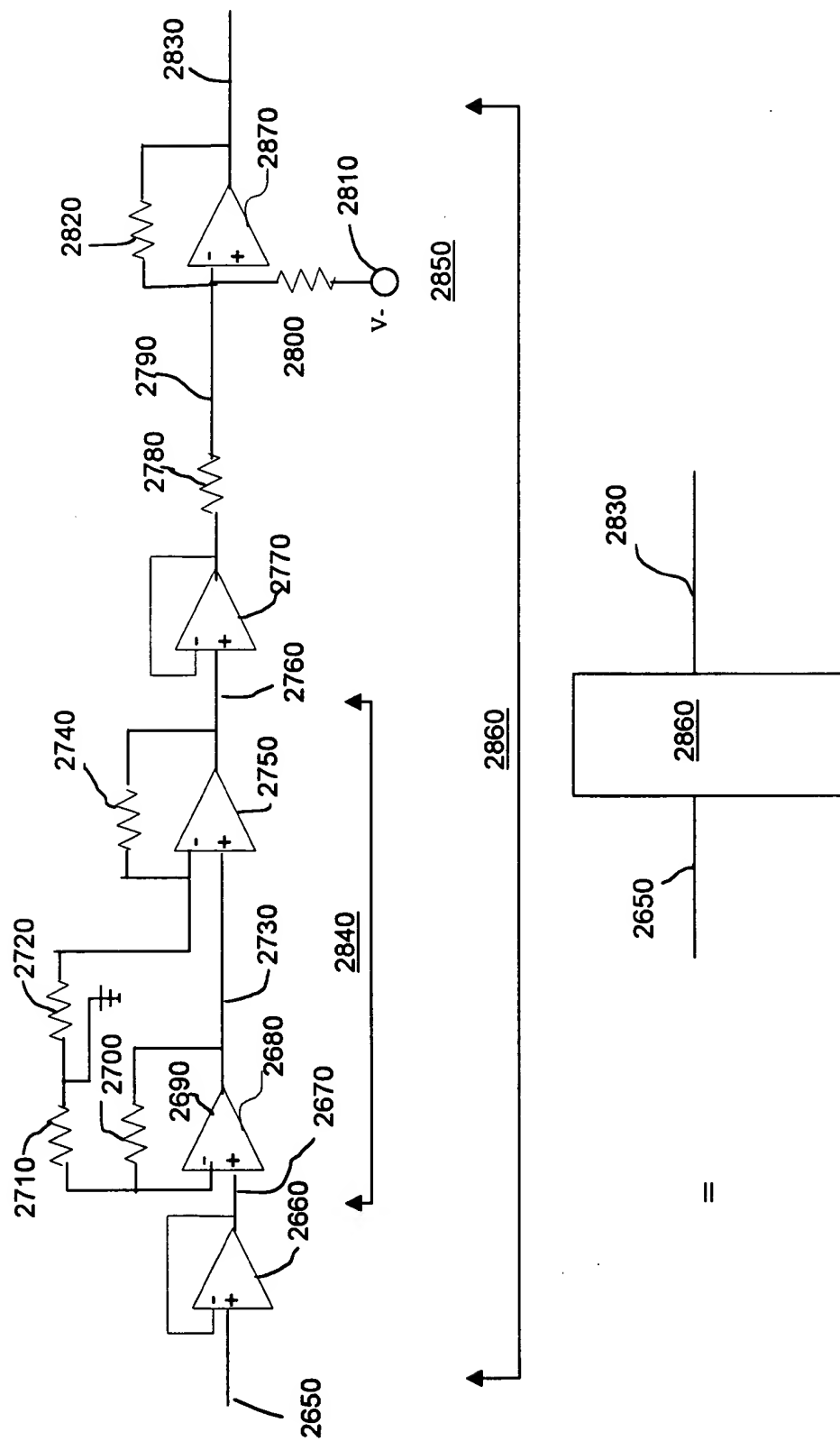


FIG. 32

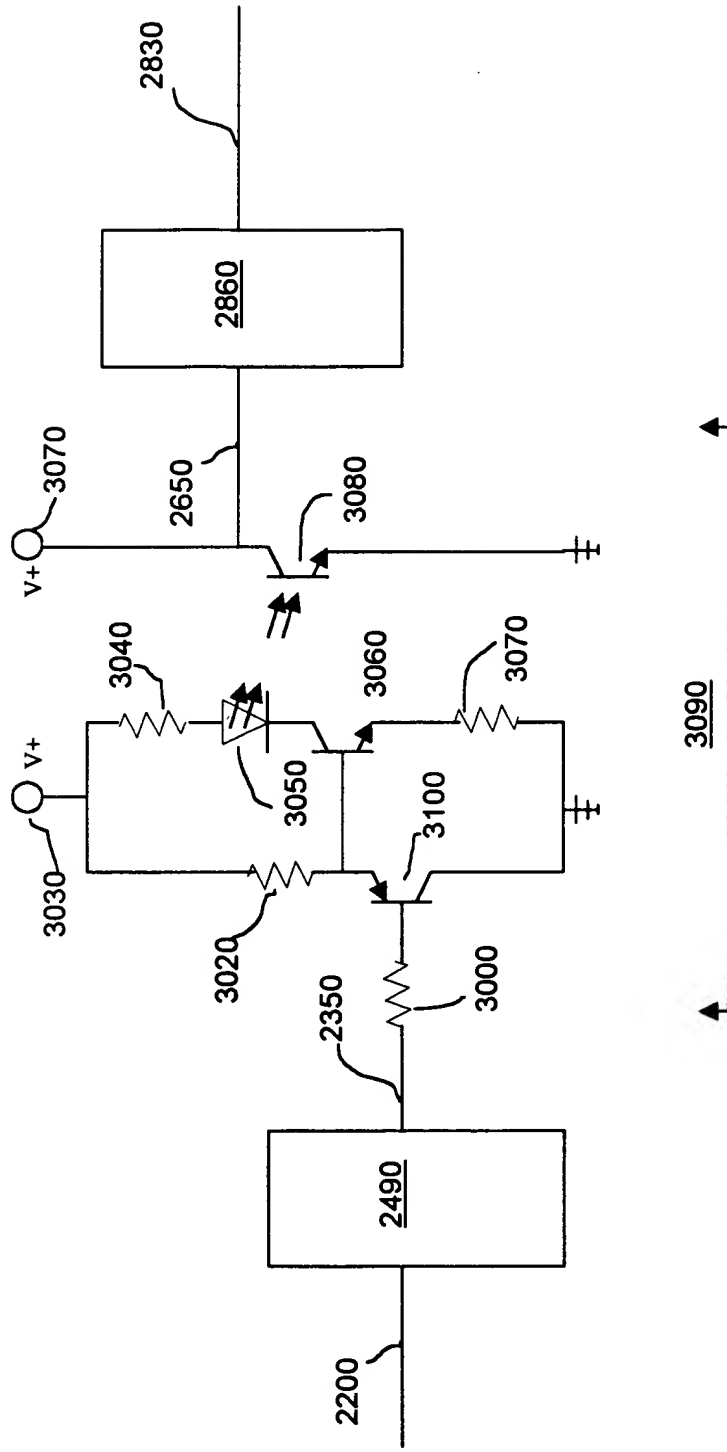


FIG. 33

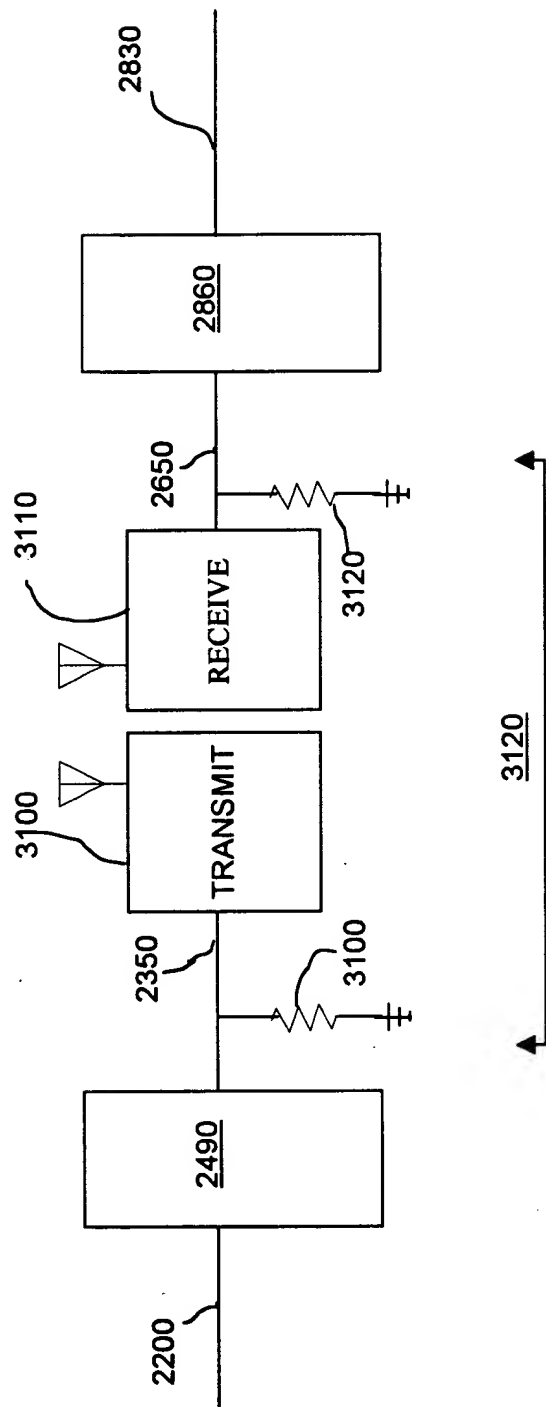
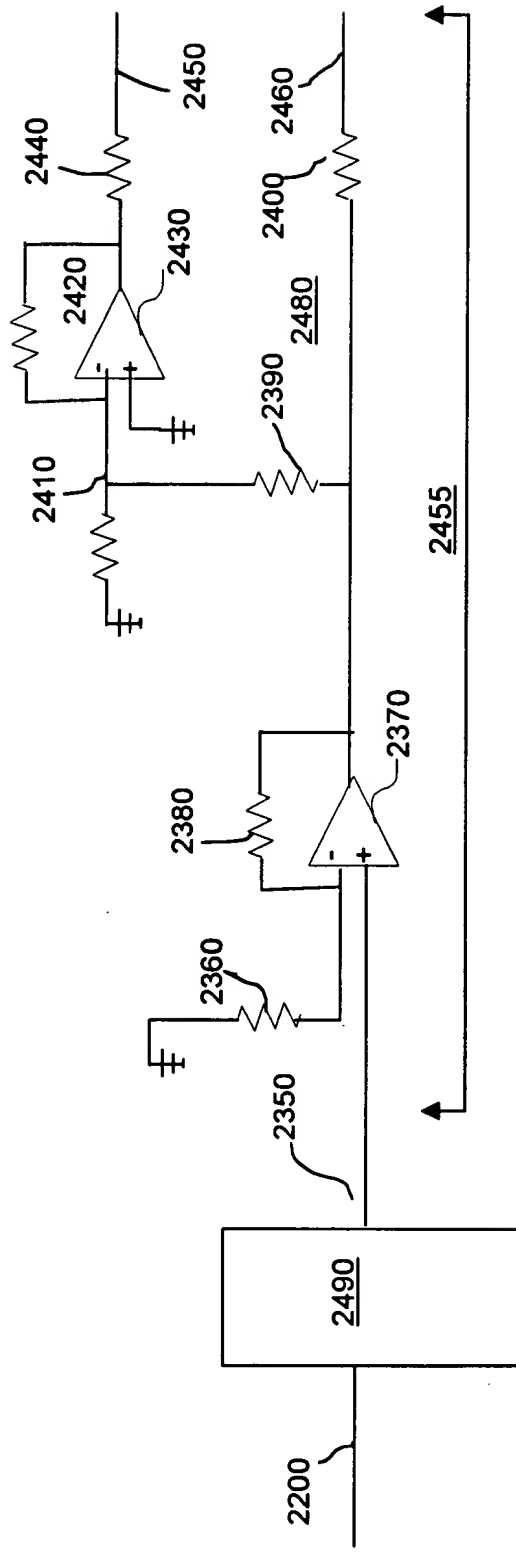


FIG. 34



**FIG. 35**

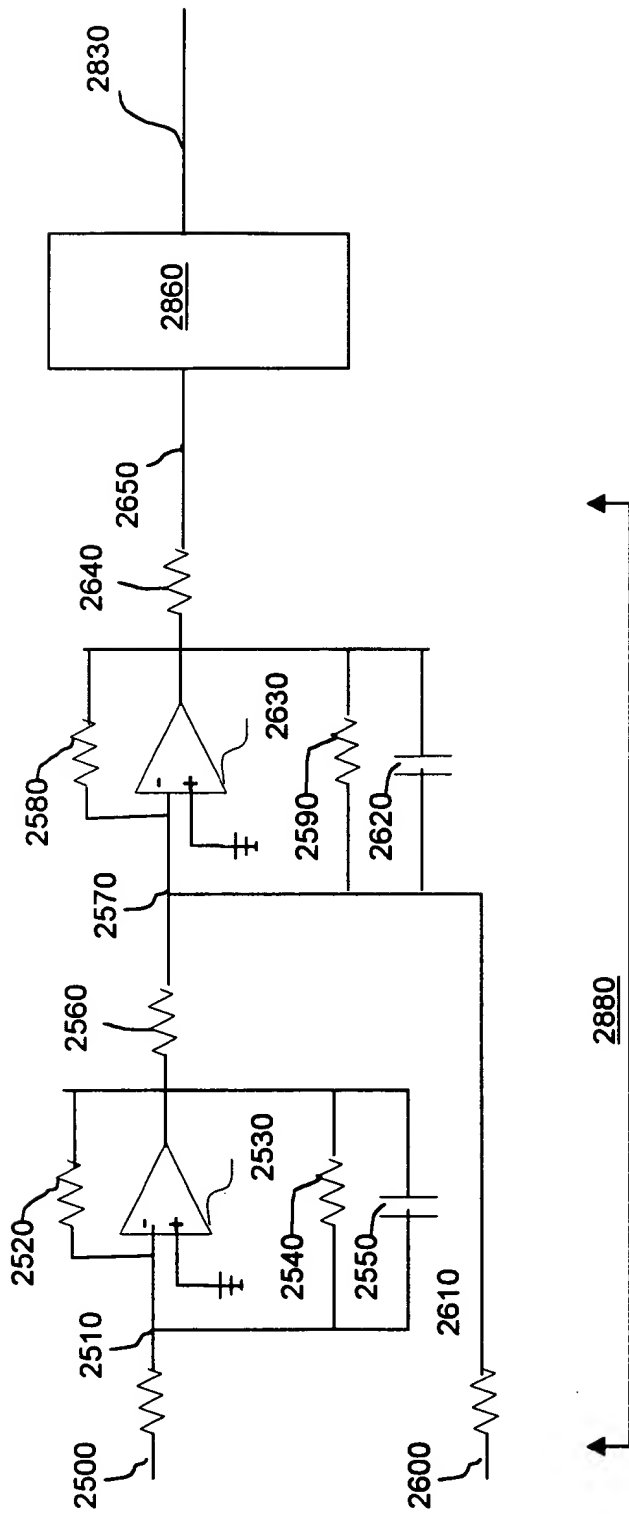


FIG. 36

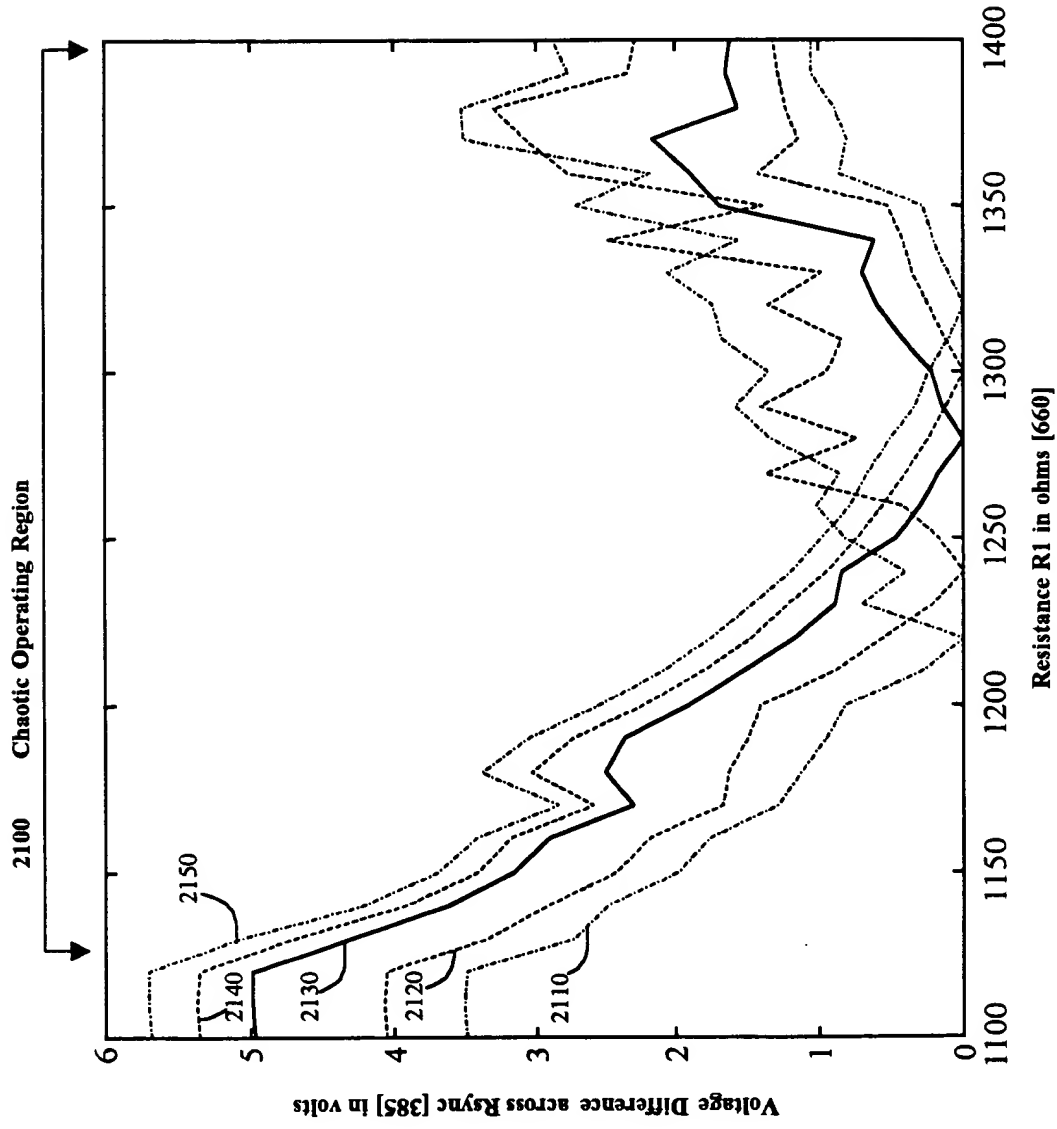


FIG. 37A

Chua's Receiver Circuit Voltage Difference Across Rsync  
in the Kennedy Diode of the Transmitter Figure 37B

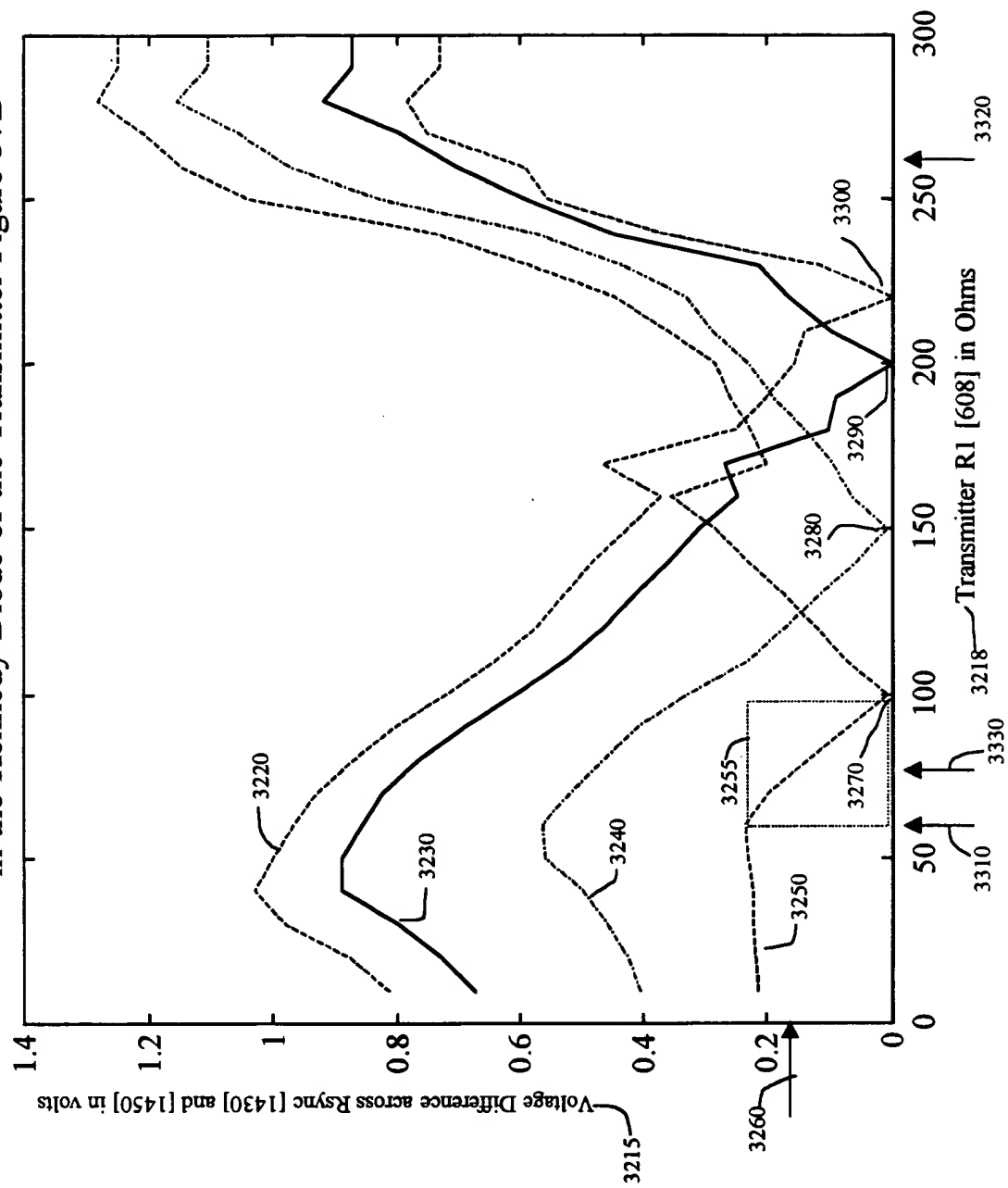


FIG. 37B

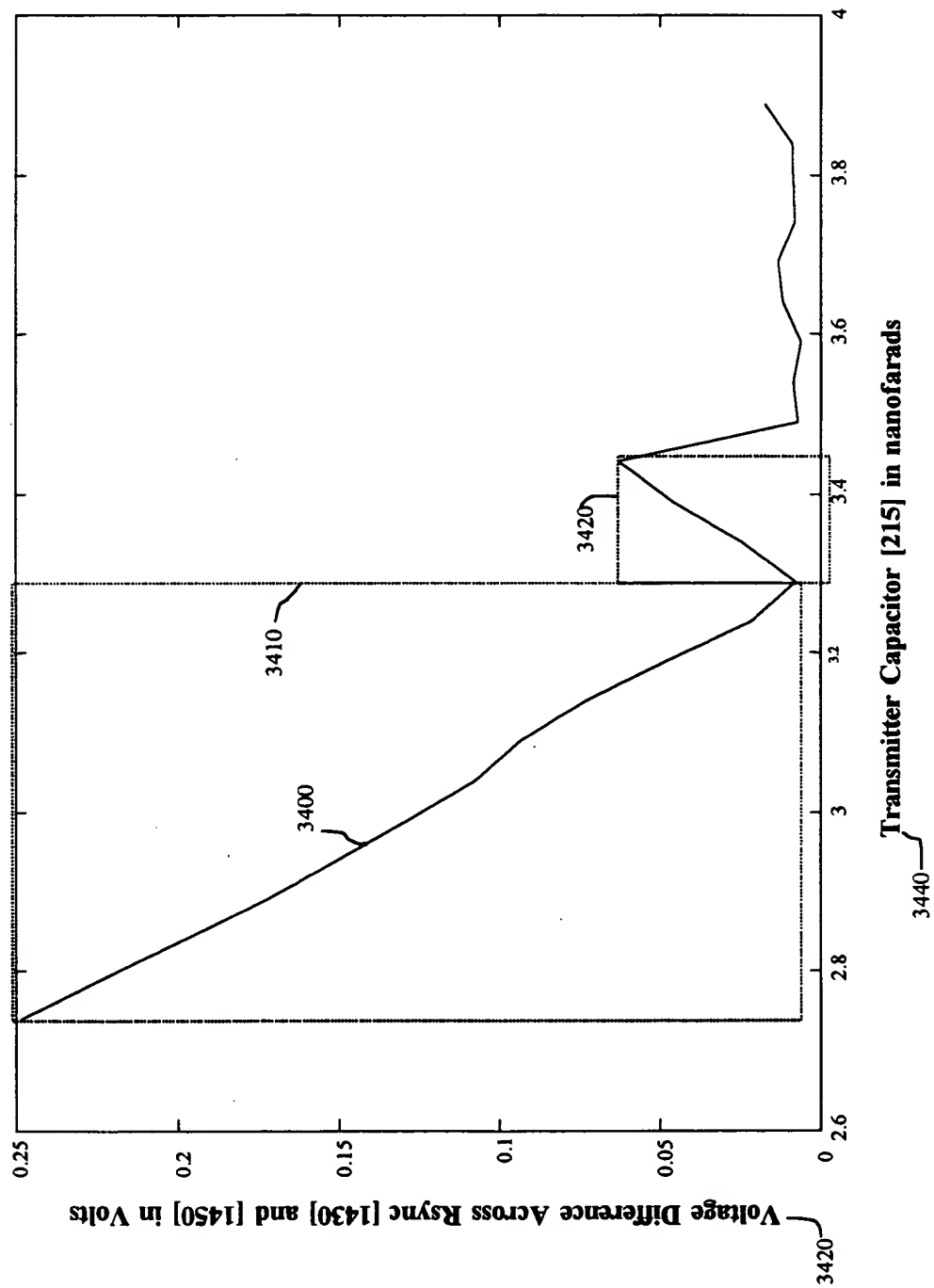


FIG. 37C



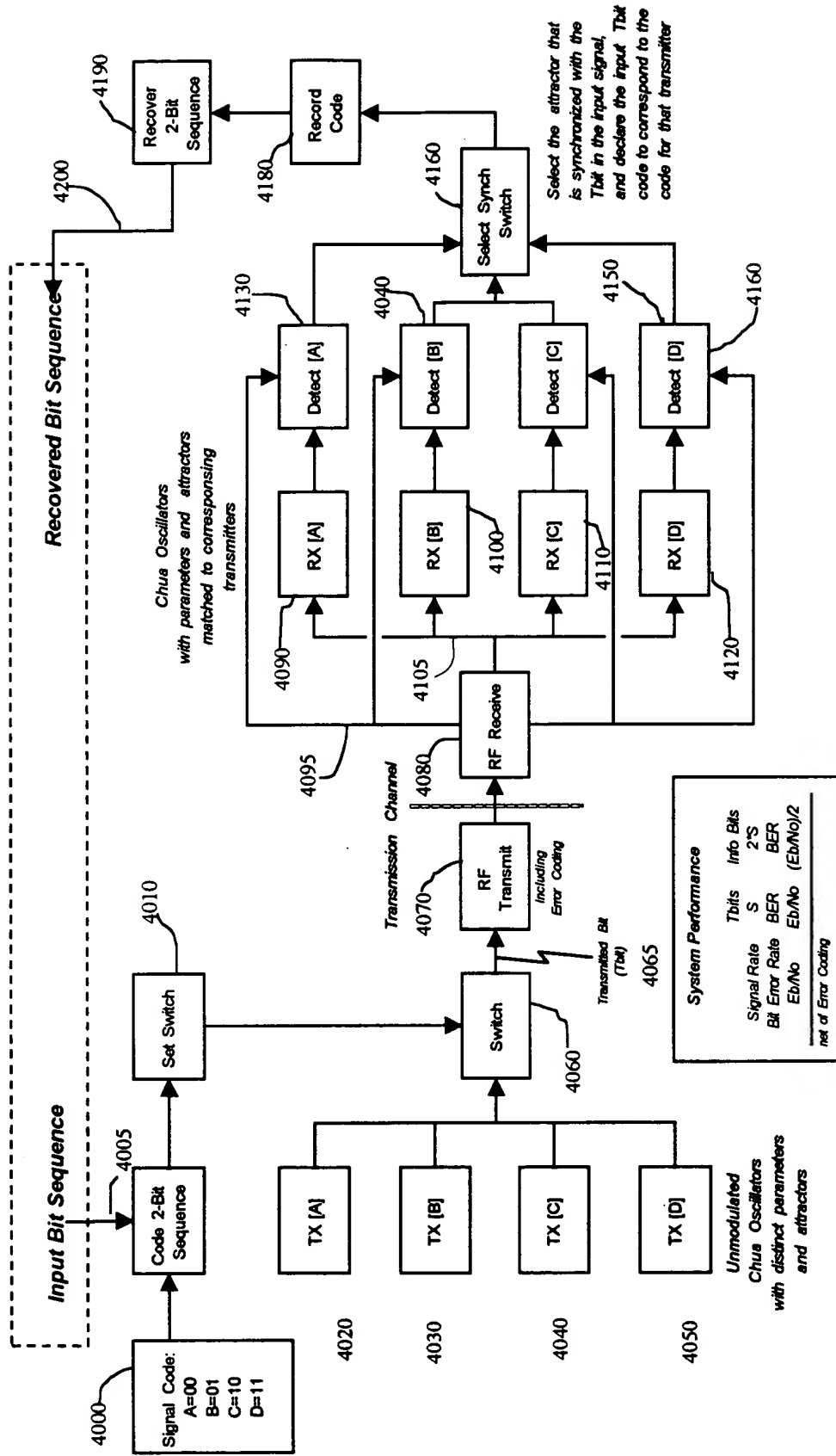


FIG. 38

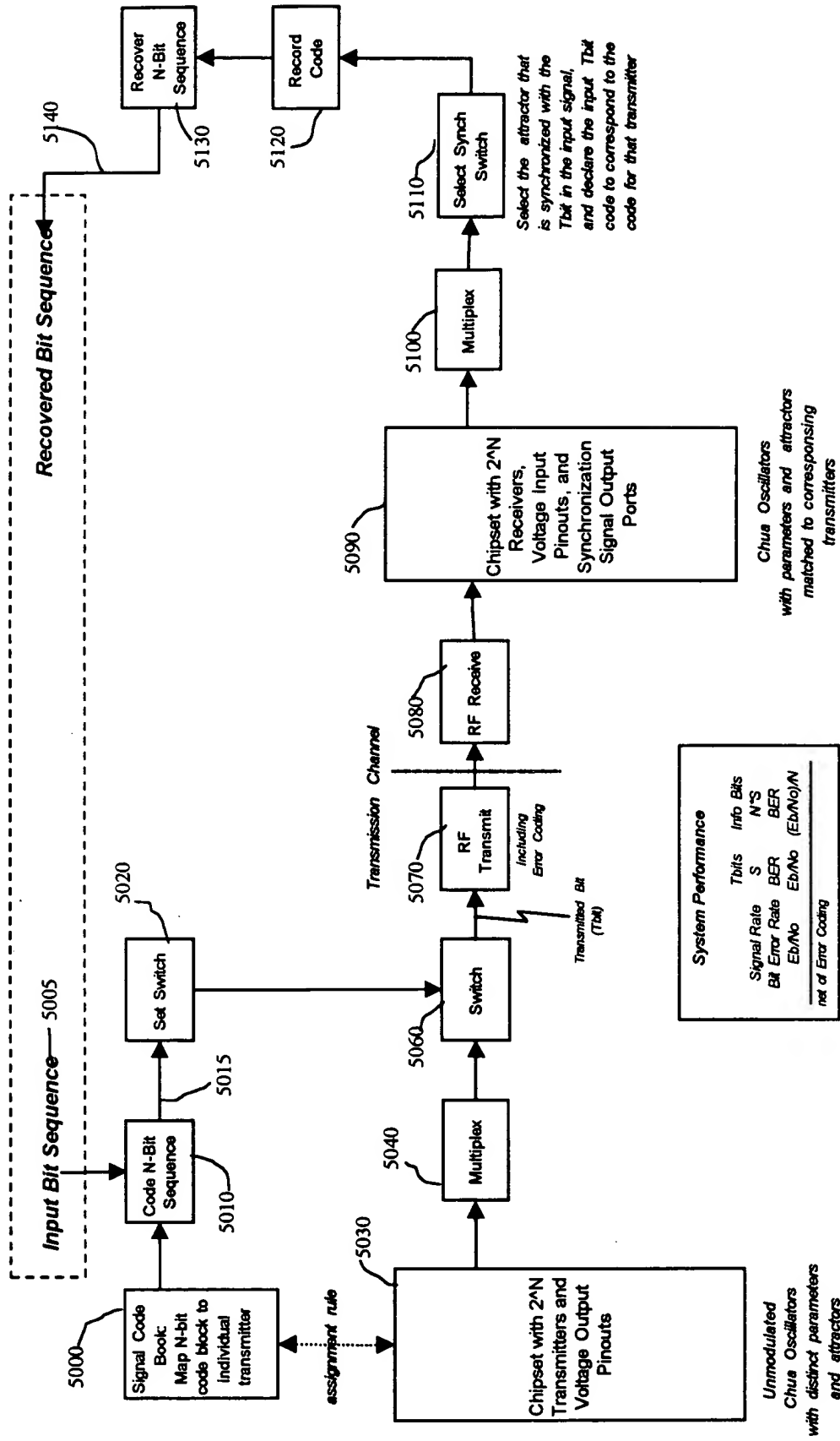


FIG. 39

$$G_b = (R_2 - R_1) / (R_1 \cdot R_2)$$

Where  $R_2$  is component [207] and/or [231]

$$+V = +VBP(G_a/G_b) - VBP = [5240]$$

$$-V = -VBP(G_a/G_b) + VBP = [5250]$$

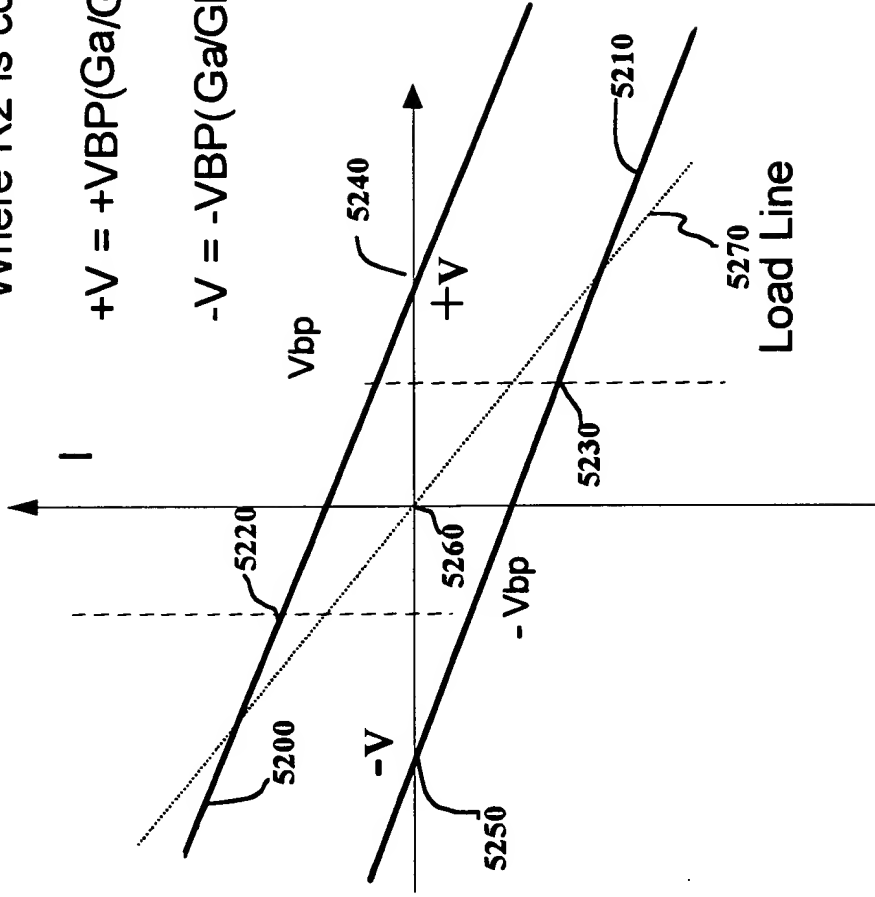


FIG. 40

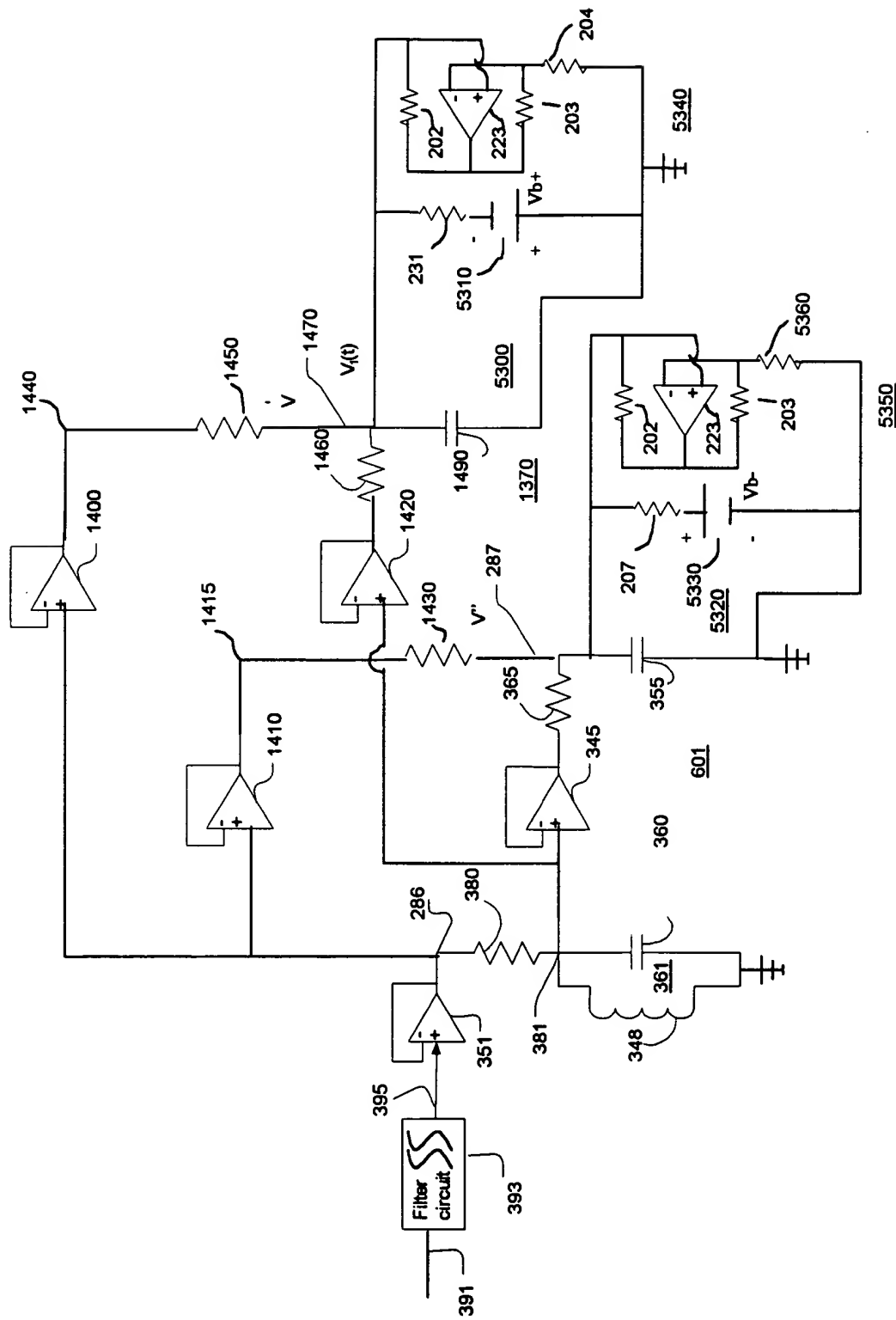


FIG. 41

# Detection Matrix

V2	V1	V1'
-/+	-	+

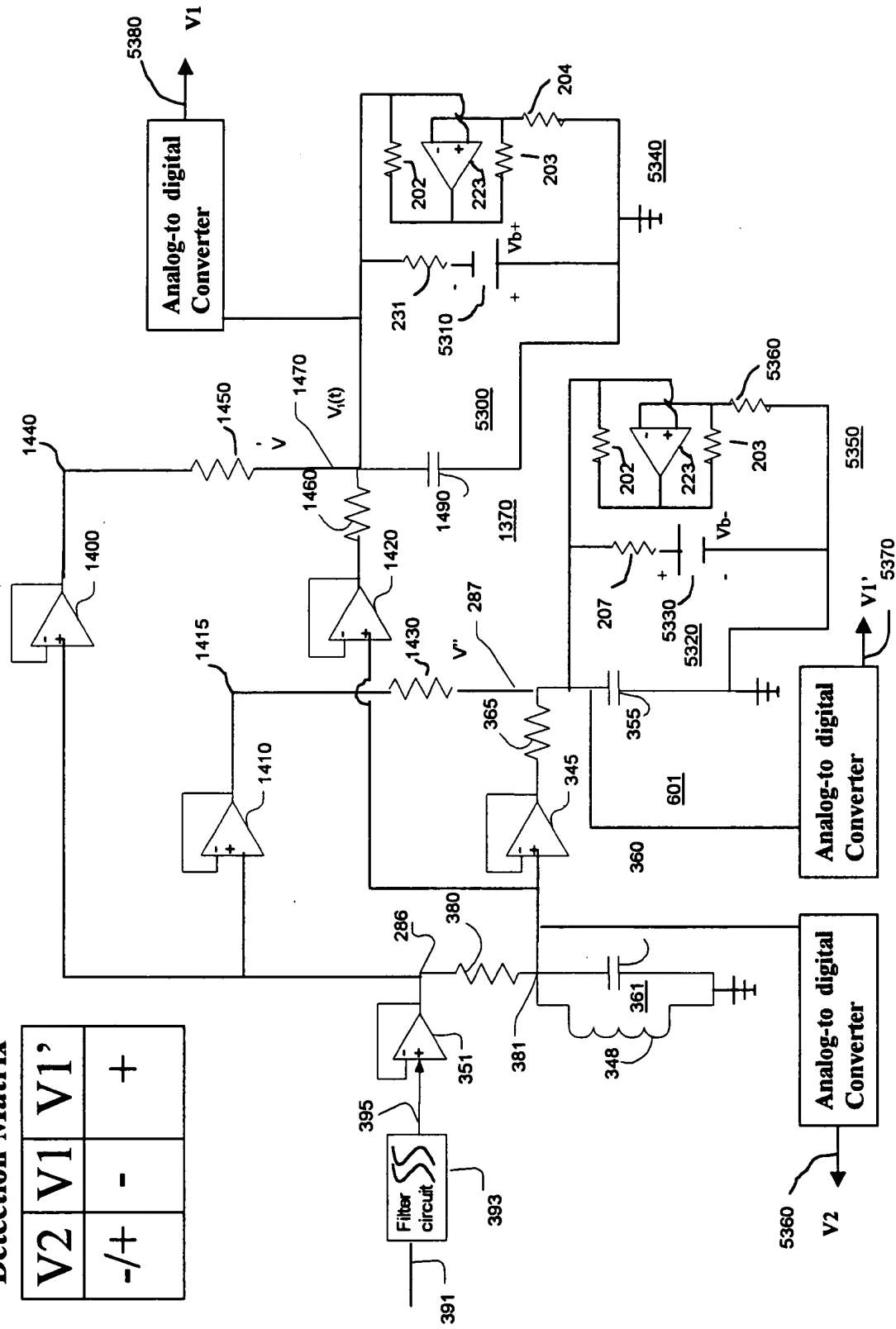


FIG. 42

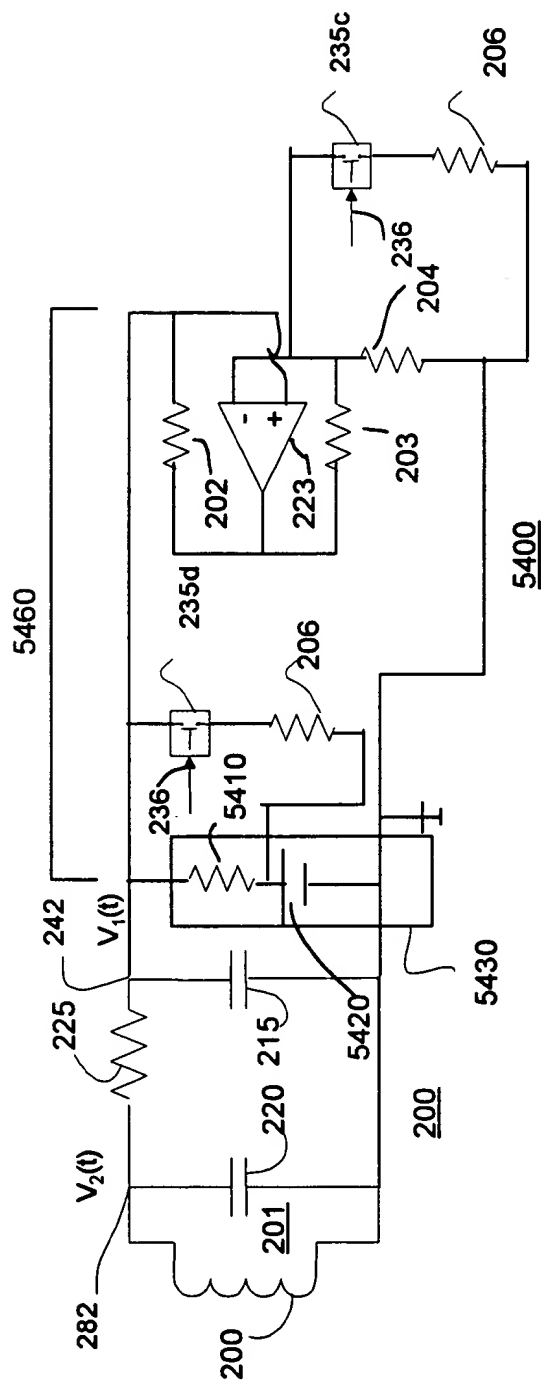


FIG. 43

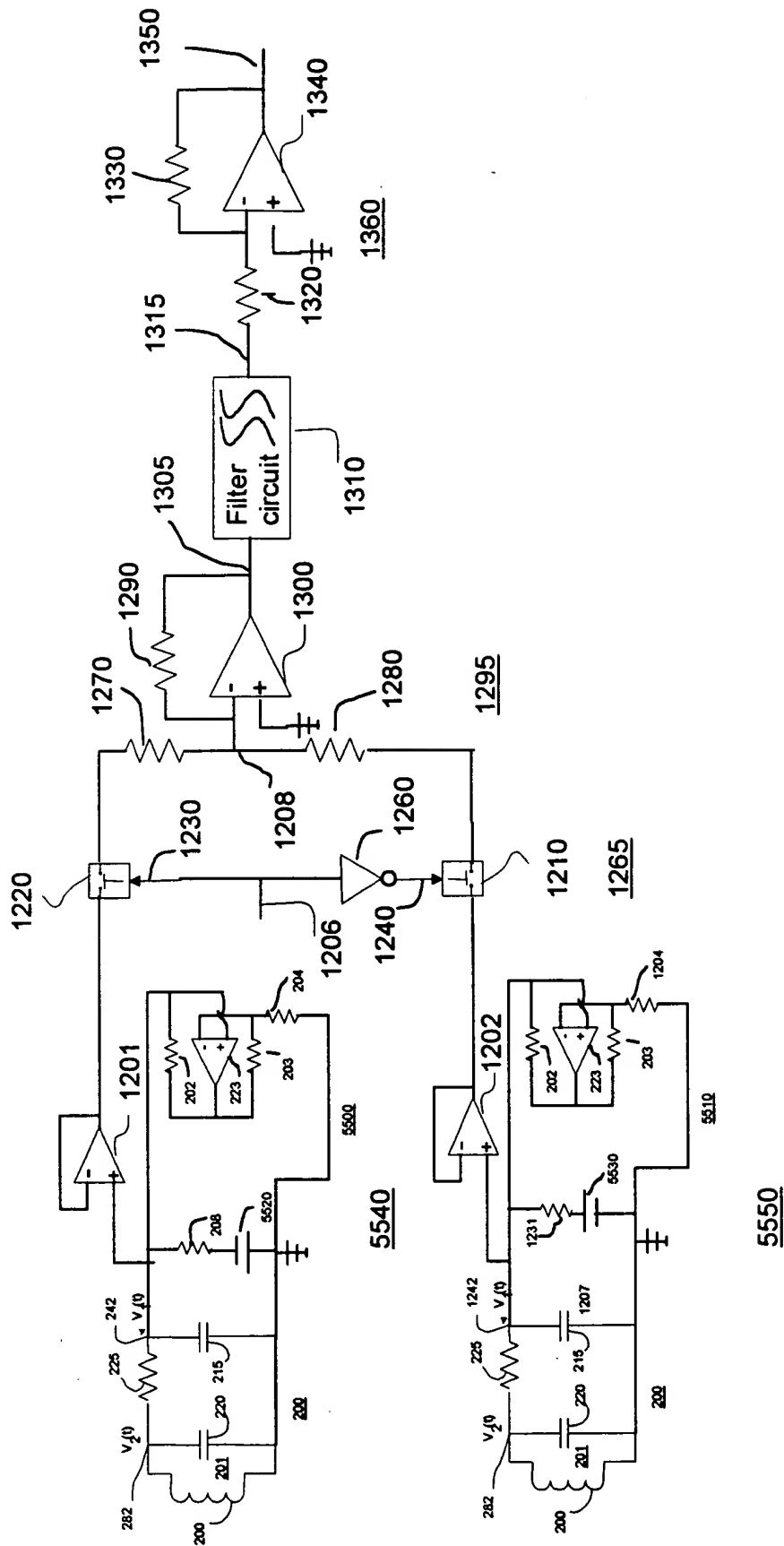


FIG. 44

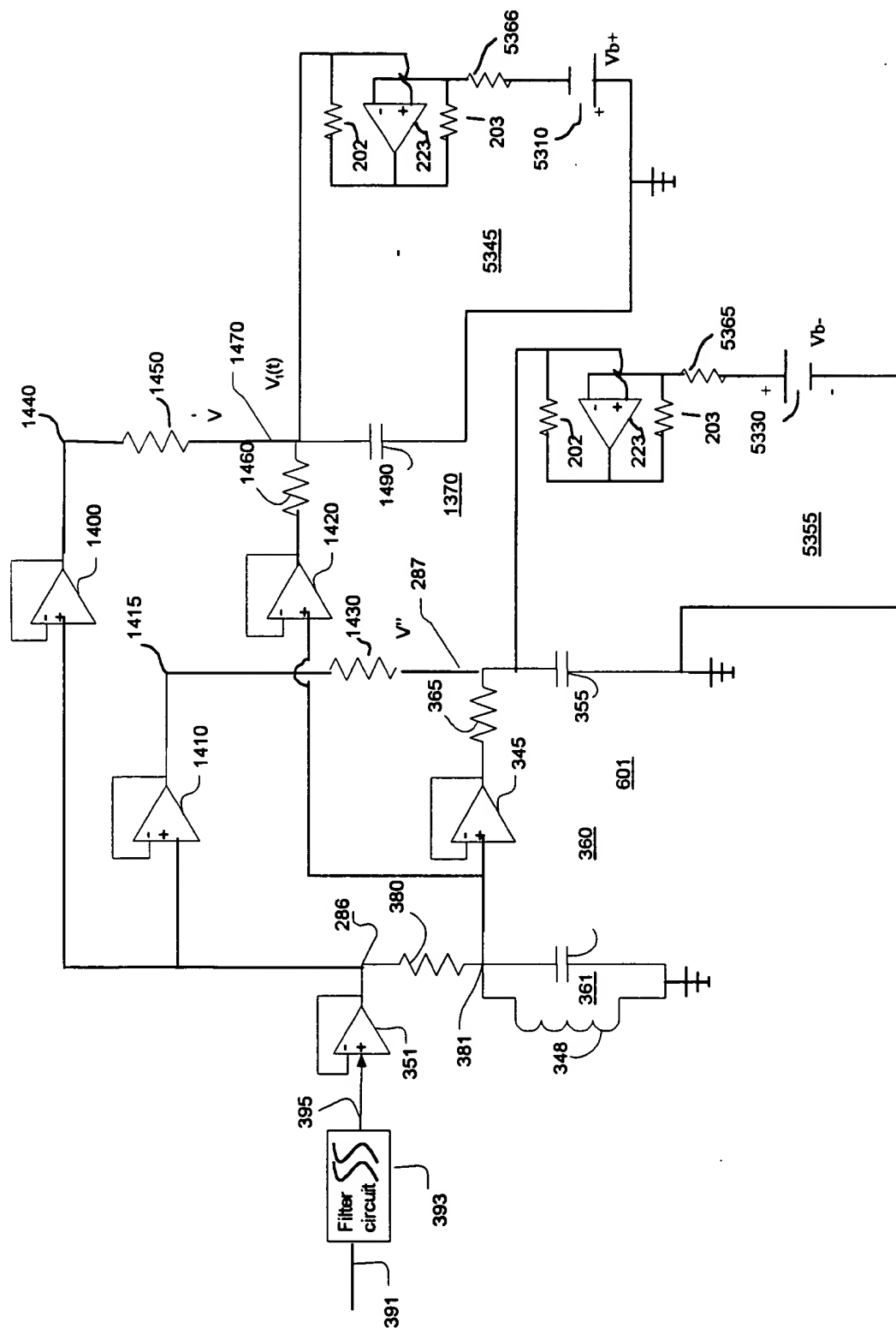
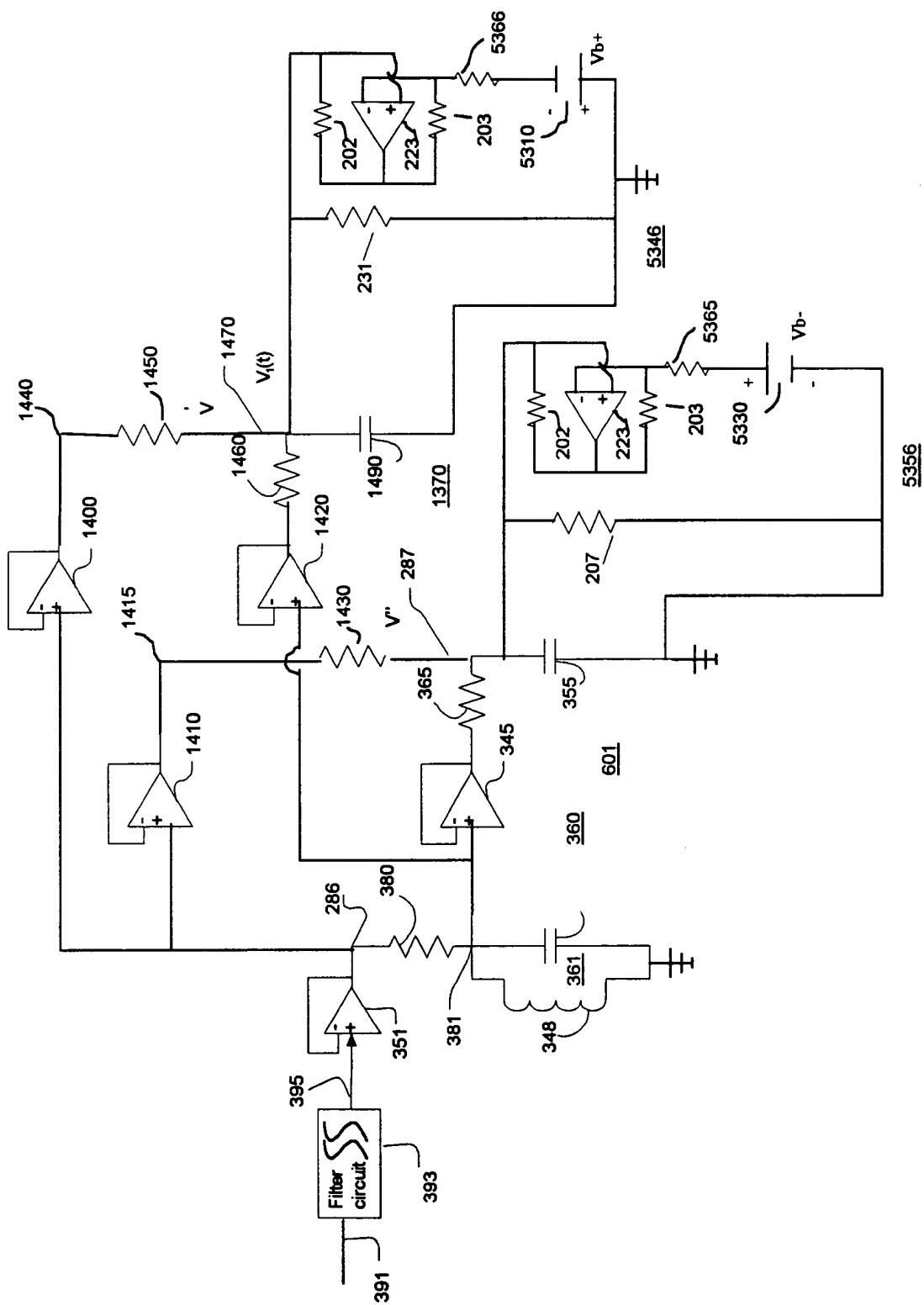
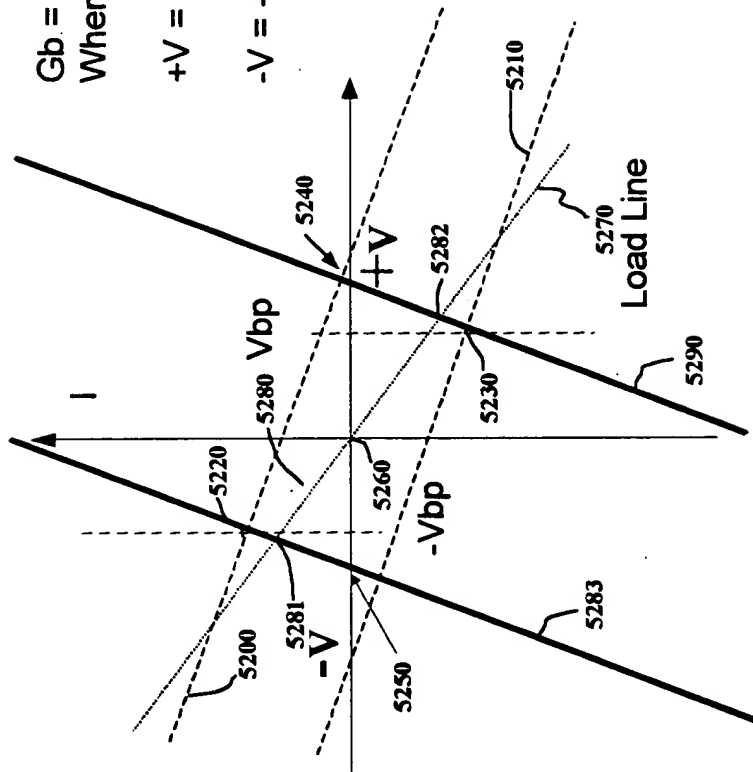


FIG. 45A

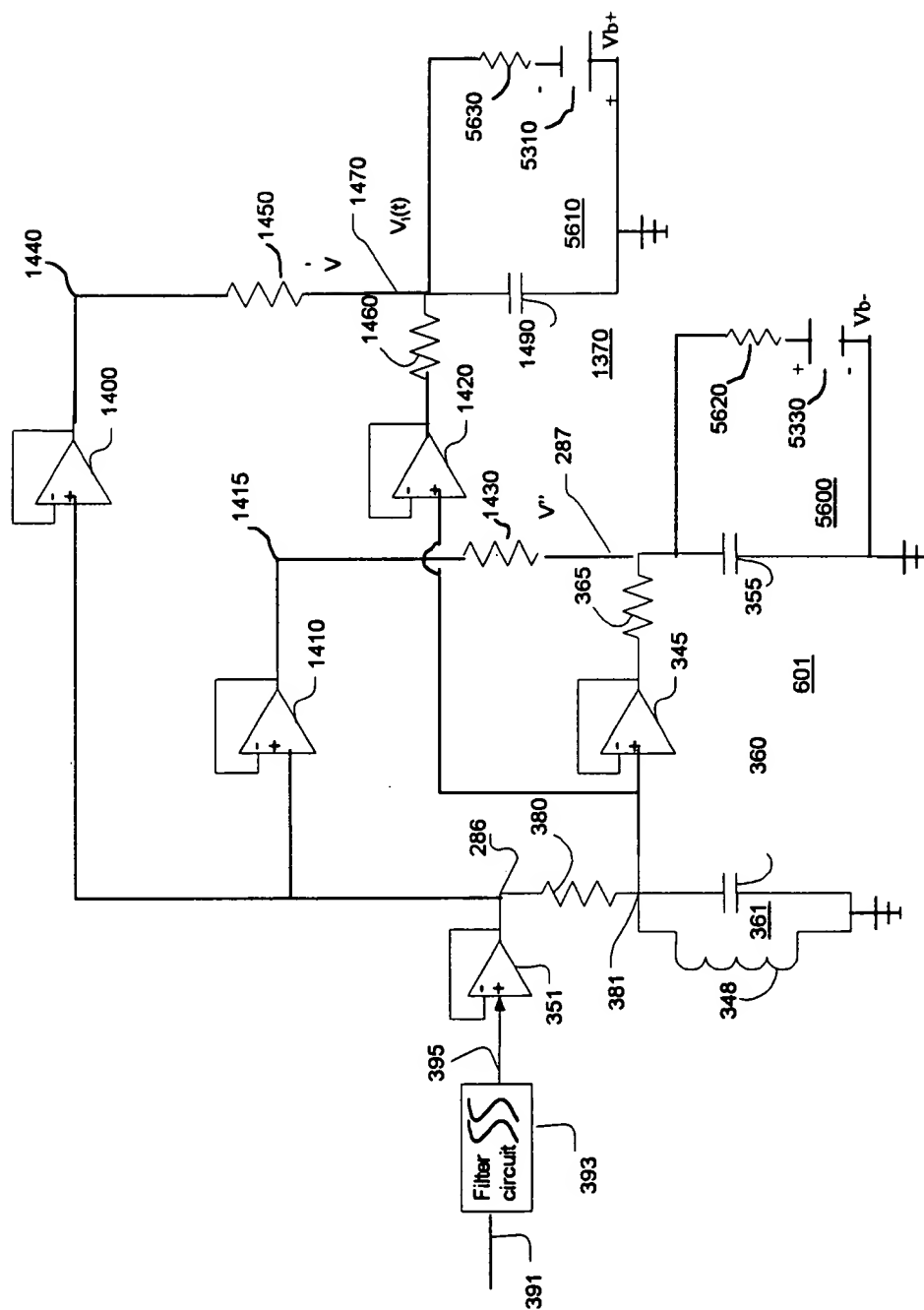






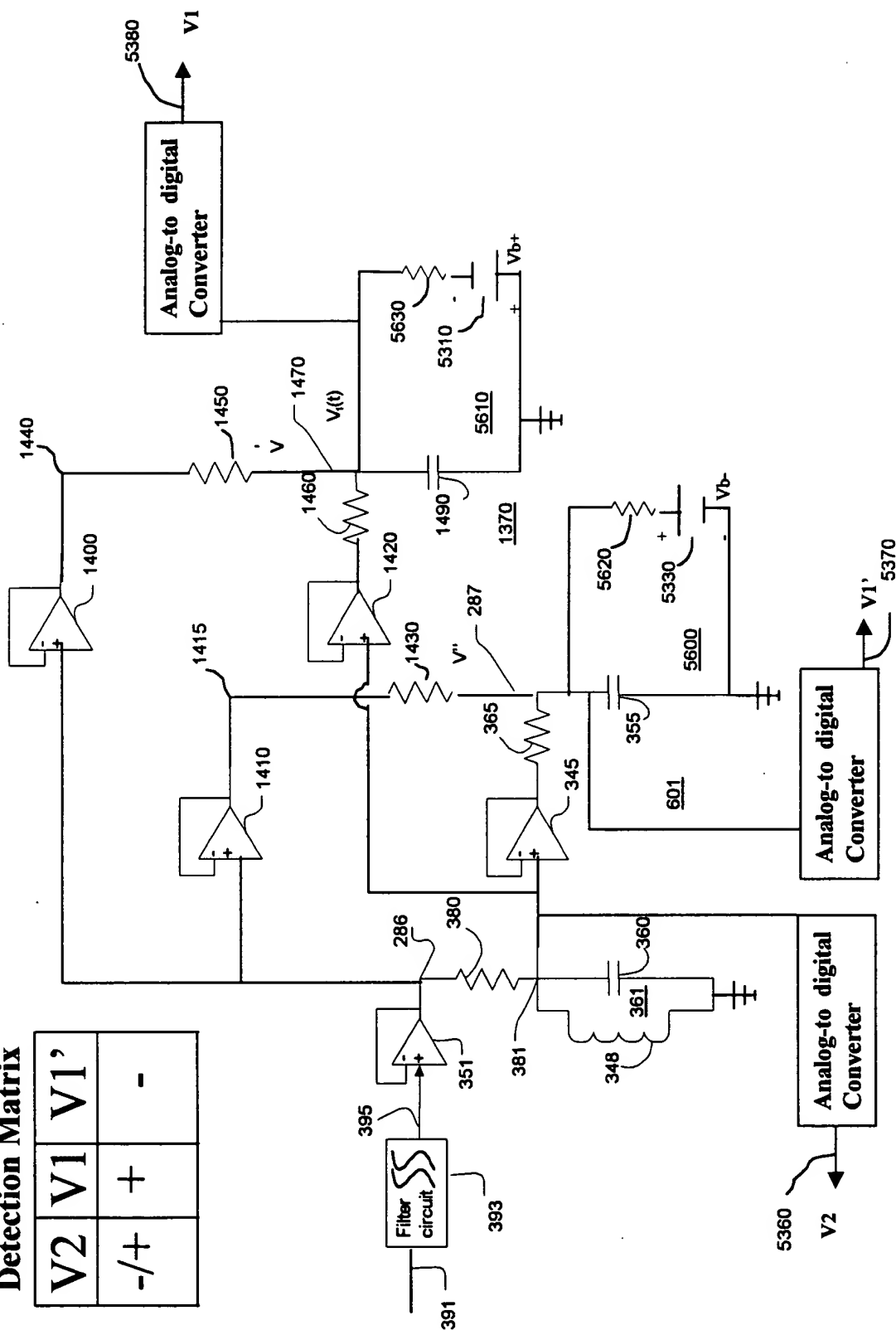
$G_b = (R_2 - R_1) / (R_1 \cdot R_2) = G_a - (1/R_2)$   
 Where  $R_2$  is component [207] and/or [231]  
 $+V = +VBP(G_a/G_b) - VBP = [5240]$   
 $-V = -VBP(G_a/G_b) + VBP = [5250]$

FIG. 46



**FIG. 47**

Detection Matrix	V2	V1	V1'
	-/+	+	-



**FIG. 48**

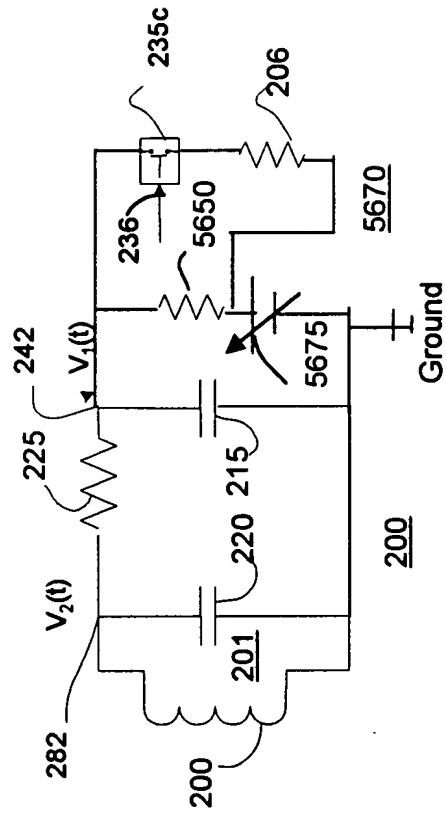


FIG. 49

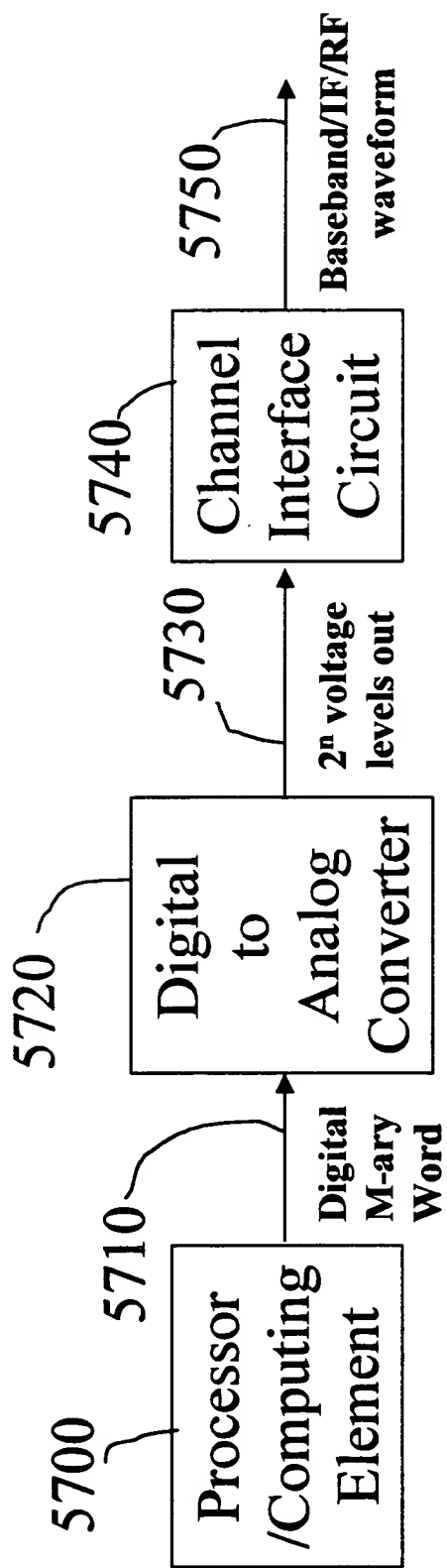
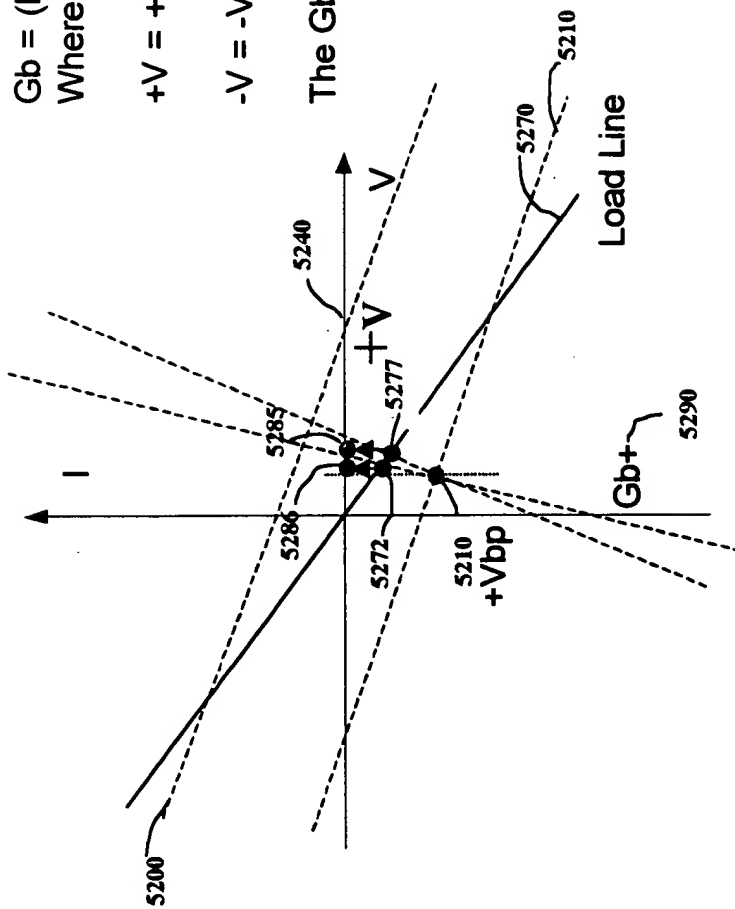


FIG. 50





$G_b = (R_2 - R_1) / (R_1 \cdot R_2) = G_a - (1/R_2)$   
 Where  $R_2$  is component [207] and/or [231]  
 $+V = +VBP(G_a/G_b) - VBP = [5240]$   
 $-V = -VBP(G_a/G_b) + VBP = [5250]$   
 The  $G_b$  sign is positive.

FIG. 52